This document describes how an adult basic education (ABE) program in Pennsylvania conducted a study skills training course to teach 54 parents how to help their school-age children with their homework. Parents also participated in informal follow-up throughout the school year. Evaluation of the program showed that it was successful both from the attitudes of participants and by their advancement in the ABE program. The curriculum contains 84 activities that cover the following topics: time management, communication skills, learning skills, assertiveness, classroom success, following directions, taking notes, study skills, test-taking techniques, essay tests, multiple-choice tests, and tips on learning. Activities include information sheets, checklists, and exercises. (KC)
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ABSTRACT

Title: Parent/Student Study Skills Connection

Address: TIU Adult Education and Job Training Center
1020 Belle Vernon Avenue
Lewistown, PA 17044

Director: Carol Molek

Phone Number: (717) 248-4942

Funding: $10,380

Number of Months: 12

Duration of Project:
From 7/1/89 To: 6/30/90

Objectives:
- to offer study skills training to 12 parents - total of 54 parents went through the training
- to design a study skills curriculum relating standard study skills material with parents' needs in supporting their children
- to design follow-up program to monitor the progress, success, and improvement of our student participants
- to produce a final report that includes the curriculum, outcome of the study skills classes, and results of the follow-up

Description:

The "Parent/Student Study Skills Connection" addressed the need to provide study skills information to parents which was then transferable to their working with their children, thus enhancing their children's school progress. The program consisted of 8 weeks of study skills instruction offered 6 times during the year. Follow-up study monitored the progress of our participants for the remainder of the '89-'90 school year. Monthly meetings were held in conjunction with the follow-up study. Meetings were designed to allow an exchange of successful study methods and suggestions for continued improvement. Our goal was to support the parent/child relationship, to create a better home study environment, and to provide a defined direction for a higher degree of success in school.

Target Audience:

Parents enrolled in our ABt program who desired to work together with their children to improve the home study environment and who
desired to make a more concentrated effort toward greater achievement and success in school.

Product:

Curriculum for "Parent/Student Study Skills Connection"

Final report

Method of Evaluation:

A positive evaluation will be based on:

- study skills training offered to 12 ABE parents - 54 parents were served

- development of a suitable study skills curriculum

- follow-up with students for the remainder of the '89-'90 school year
"The Parent/Student Study Skills Connection" addressed state priority 9 - grant to support multi-generational learning programs.

This proposal addressed an urgent need to provide study skills information to parents which was then transferable to their working with their children, thus enhancing their children's school performance. Children want to know they are succeeding and their parents want some concrete evidence of that success. By teaching parents about an atmosphere conducive to learning and by exploring avenues of different study techniques, we bridged an often misunderstood gap and brought that degree of success to a more obvious reality. Often the misunderstandings and frustrations of studying were due to lack of communication between child and parent. By providing suggestions for ways for parent and child to work together, we enhanced and supported the parent/child relationship, creating a means for a better home study environment, and providing a clearly defined direction for a higher degree of success in school.

The "Parent/Student Study Skills Connection" was a basic twofold program. The actual study skills classes consisted of 8 weeks of instruction offered 6 times during the year. The curriculum was basic in content and format and was structured to meet the needs of both elementary and middle school students and parents. The instruction for most study skills programs consists of besieging parents with handouts and telling them what should be done to structure the perfect home learning environment. Those components of any study skills program are important. However, the innovative aspect of this parent/student connection was to have the participants bring to the study skills
sessions their textbooks and their actual homework assignments. We then applied our information and instruction to the participants' specific needs. Specific study skills topics were covered during each week of instruction, but all sessions included time to address any subject area. The study skills programs ended with a parent evaluation consisting of instructor/material ratings and suggestions for future study skills curriculum. The second phase of this program consisted of follow-up. We intended to monitor each of our parent/child participants for the remainder of the '89-'90 school year. We also intended to meet with our parents on a regular monthly basis to check progress and success. We had hoped to see some actual, measurable degree of improvement from our study skills curriculum. In this area we were less successful than hoped.

The time schedule followed the proposed schedule:

July/August - Curriculum development - however, changes and additions to the curriculum were done on an ongoing basis throughout the year

September - Parents recruitment

October-May - Course offered 6 times over the year in 8 week sessions

November-June - Follow-up

June - Final report

Project Director was Carol Molek. Ms. Molek has over 6 years experience coordinating adult programs for the IU and developing curriculum. Barbara Goss, ABE Instructor and Tutor Coordinator, developed and implemented the study skills curriculum. Ms. Molek and Ms. Goss jointly previously developed 310 projects of curriculum development: The Writing Wheel and Ready-Set-ABE.
The project was administered by the Tuscarora Intermediate Unit No. 11. The TIU is a local educational agency which provides educational and management services to 11 school districts and 2 area vocational technical schools in Fulton, Huntingdon, Juniata and Mifflin Counties.

The Intermediate Unit operates or oversees all Adult Education and Job Training Center programs at the Juniata-Mifflin Area Vocational-Technical School. Center programs have included: 306/321 ABE and GED programs; Act 143 ABE Program; the GED Alumni Association; JTPA ABE/GED programs, and JTPA Job Search program, Project: Drop-In, Dislocated Worker Job Search program; Project: Re-Entry for single parents and displaced homemakers, and thirteen 310/353 special projects.

The TIU Adult Education and Job Training Center at the Juniata-Mifflin Area Vocational-Technical School in Lewistown is the home of 15 adult education programs meeting the needs of adults in Juniata and Mifflin Counties. February '90 marked the Adult Education Center's 6th year of successful operation.

The audience this report addresses is ABE administrators, teachers, counselors, and tutors. The report and project were geared to anyone interested in family literacy promoting parents and children working together for their mutual benefit.

Copies of this report will be filed with the Division of Adult Basic and Literacy Education Program, Pennsylvania Department of Education, 333 Market Street, Harrisburg, PA 17126-0333, and Advance, Pennsylvania Department of Education, 333 Market Street, Harrisburg, PA 17126-0333.
PROJECT DESIGN

The general design of the "Parent/Student Study Skills Connection" involved a two phase plan. Phase 1 consisted of ABE parents participating in the study skills classes. The target audience was ABE parents who showed interest in improving their own basic skills. It was our intent to reflect the adults' performance in the students' performance. It followed logically that adults concerned about their own knowledge and performance level in the basic skills then showed an equal concern for their children's performance in school.

In further defining our target audience, the ideal participants for our "Parent/Student Study Skills Connection" were parents who had a child or children considered at risk. These children were those who were generally struggling to meet sufficient academic standards. We saw a need to assist those ABE parents and students in developing a solid academic direction for improvement with good study habits. For our ABE parents, it was our intent to provide them with the necessary information they needed for their basic skills improvement. For their children, the results we were anticipating were improved academic proficiency.

The classes met for 8 weeks. Classes were 2 hours and met one evening per week. Enrollment in the program was estimated at 12 parent participants. However, because the curriculum was so well received we repeated the 8 week sessions 6 times over the year serving a total of 54 parents. The participants were ABE students/parents who showed a desire to improve their own basic skills. We specifically defined ABE parents as those who entered training at a 5-8 grade reading level and wanted to improve their basic level of knowledge and skills for GED.
Directed curriculum included the following material: foundations of good study habits, parenting skills, time management and goal setting, test taking techniques, language and writing skills, improving reading comprehension, the listening process, notetaking and organizational skills, study techniques for specific subject areas, how to use a textbook.

Guest speakers who are considered experts in certain curriculum or study skills areas were involved in the directed curriculum portion of the study skills program. A reading specialist, a drop-out prevention coordinator, a middle school/high school guidance counselor made presentations.

Phase 2 involved follow-up. Follow-up consisted of keeping up with the progress of our ABE students and their children for the remainder of the '89-'90 school year. Children and parents were asked to keep progress journals. Journals emphasized successes, improvements, and special achievements. Parents were asked to meet on a monthly basis to exchange successful study methods and suggestions for continued improvement. We attempted to solicit feedback from the children's teachers and guidance counselors reflecting successes, improvements, and problems. It had been hoped that through this cooperative effort, we would be able to document the achievements of our ABE students and their children and to learn how effective our study skills curriculum had actually been. We felt that strong, transferable study skills would be the result.

The follow-up area of the project was the most difficult and least successful of our activities. Although we had no difficulty in having interested students participate in the study skills training, we did have
difficulty in having them commit to a long term follow-up program. They were interested in working on their own with their children but not in establishing formal, structured follow-up with us. Because of this we modified our structure to maintain informal contacts with our past participants and to keep up with them on that level.
OBJECTIVES/RESULTS

a) to offer study skills training to 12 parents who desire to work together with their children to improve the homestudy environment and who desire to make a more concentrated effort toward greater achievement and success in school.

This objective was certainly met. The study skills program was popular with students. Since we found the content of the curriculum to be so vital to our ABE students we offered the program 6 times over the year and served 54 student/parents.

b) to design a study skills curriculum that incorporates standard study skills materials with the flexibility to meet the immediate needs of the ABE students participating in the program. Curriculum should strike a comfortable balance of directed material and immediate student need.

We are very pleased with the outcome of this objective. The curriculum assembled is comprehensive and targeted to the needs of ABE parent/students. We will certainly be continuing to use the curriculum in our learning center in the future and hope that it will be widely adapted throughout the state.

c) to design a follow-up program to monitor the progress, success, and improvement of our participants.

Our plans to develop a structured follow-up program met with resistance from our participants. Once the study skills instruction ended we maintained contact with students informally through phone and personal contact. However, students did not want to participate in regular monthly meetings.

d) to produce a final report that includes the curriculum, the outcome of the actual study skills classes, and the success of the follow-up study.

This objective is met by the completion of this report and the curriculum that follows.
EVALUATION

Evaluation based on the following met criteria:

a) study skills training was given to 54 parents (12 planned)

b) follow-up of participants for the remainder of the '89-'90 school year. Measurement of this criterion will depend greatly on evidence of academic improvement and success in GED diploma attainment. Of the 54 involved in training 44 showed evidence of academic improvement; 31 attained their GED diploma or met objectives; 21 were continuing in ABE programs at the year end.

c) success of the monthly follow-up meetings. Monthly meetings were not successful. Students resisted this structure but did respond to a more positive approach. However, some students did follow our suggestions to keep a journal to record progress of children. (Examples follow this section.) These journals were then shared with the instructor and solutions to problems and strategies were developed.

d) suitable curriculum designed to incorporate standard study skills materials with flexible time to deal with students' immediate needs. The curriculum (follows this report) was developed and successfully implemented throughout the year.

e) a final report demonstrating the progress and success of the curriculum.
CONCLUSION/RECOMMENDATIONS

The "Parent/Student Study Skills Connection" program was successful in several ways. The program allowed us to address the need expressed by our students of writing concrete methods and techniques to assist their children with learning at home. Benefits to parents were two-fold: first, parents enrolled in ABE instruction developed their own study skills; and second, parents learned that they could transfer their own improved study skills to their children.

The feedback we've received from parents has been most positive. Parents found the curriculum interesting, useful, and adaptable for use at home. Unfortunately, parents were not responsive to our efforts of doing long term follow-up activities with them. They were resistant to making this commitment but were cooperative on an informal basis.

Recommendations for the future are for other ABE programs to adapt the curriculum to meet their needs. We feel their students will be responsive and increase their own performance level by utilizing the curriculum. In turn, parents who are exposed to these study techniques will then transfer their skill to benefit their children.

In our efforts to promote family literacy efforts locally, we plan to pursue two other areas of interest and would suggest that others might want to also explore these learning areas:

1) We will run a small workshop in the beginning of the school year for parents on how to overcome their fear of contacting their children's teachers and how to best communicate with these teachers during the school year.
2) We will offer a workshop for teachers and administrators on better ways to work with and communicate with parents.

Family literacy remains a priority at our Adult Center and in our community. We will continue to develop activities to encourage a more open and inviting atmosphere for adult and family learning in PA.

Coordination of the "Parent/Student Study Skills Connection" has been between the Adult Center staff and area agencies supporting this project: Mifflin County School District Chapter I Program, Mifflin County School District Dropout Prevention Program, and area human service agencies.

Dissemination of the final report and curriculum will be made through the TIU, AdvancE, and PDE.
The Parent/Student Study Skills Connection

CURRICULUM

Tuscarora Intermediate Unit #11
Adult Education and Job Training Center
1020 Belle Vernon Avenue
Lewistown, PA 17044
THE PARENT/STUDENT STUDY SKILLS CONNECTION

CURRICULUM

Carol Molek, Project Director/Coordinator
Barbara Goss, Instructor

'89 - '90

June 29, 1990

TIU Adult Education and Job Training Center
1020 Belle Vernon Avenue
Lewistown, PA 17044
717-248-4942

98-0040 - $10,380

The activity which is the subject of this report was supported in whole or in part by the U.S. Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education or the Pennsylvania Department of Education, and no official endorsement by these agencies should be inferred.
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Introduction

This curriculum was developed to fulfill two needs in our Adult center programs: 1) We wanted to develop a curriculum to improve our ABE Parent/Students' Study Skills, and 2) we wanted to address requests from our students to help them more effectively with their children to improve their children's performance in school.

We feel this curriculum has met our needs and will continue to do so. Our hope is that you will find the materials a valuable asset to your study skills program, and that you and your students will find the results positive and helpful.

Two areas of the curriculum seem especially important to us and are not often included when approaching study skills. These areas are time management and communication and listening skills.

As part of the curriculum we also include three videos: You Pack Your Own Chute, Winners: Success Stories Series, and Success in the Classroom.

The information presented in the videos and in the time management and communication units gives our students a more complete understanding of ABE or GED studies. This understanding allows them to participate in some personal confidence building and self-esteem improvement.

Please note that there is a complete bibliography at the end of the curriculum. The bibliography is a comprehensive listing of resources for study skills information and for pamphlets you may want to make available to your students. The materials within each section are footnoted wherever a source was known. Sections without footnotes were developed by our staff as part of our project. It is our intent that the materials in the curriculum serve as an example of the materials we assembled and created to meet the needs of our participants. It is hoped that our readers will refer to our choices and the sources from which they came and use whatever is applicable to your needs by referring to the original sources. Our apologies to any source which was not properly credited. We made every effort to document our sources and offer these sources for the use of others.

A special thanks to our study skills instructor, Barbara Goss, for her dedication to her students and her work on this curriculum. And thanks to Michelle Driesbach who produced such readable and attractive copy of our Mac.

We also thank the Division of Adult Basic and Literacy Education Programs for providing funding for this & other 353 Projects that assist in the development and expansion of services to our participants.

Carol M. Molek
Project Director
TIME MANAGEMENT
TIME MANAGEMENT

Introduction

Time management has become an increasingly important part of study skills. If we want our students to come to GED classes, do their homework, and spend additional time reading and studying, then we need to provide them with practical, workable information that will help them manage their time wisely and efficiently. Time management is incorporated into our study skills program during the second week of classes. Many times, after the first week of classes, our students are naturally feeling a bit overwhelmed, and they are wondering how they will find time to deal adequately with their GED studies, keep their family functioning, and most importantly, retain their own sanity! The time management strategies offered are practical, common sense ideas that work. We have received much positive feedback from students who have tried many of the ideas and suggestions and found them to be extremely helpful. We feel confident they will work for your students, too.

These time management strategies are perfect for your students to use with their own children to teach them good time management skills. Frequently, the subject of time, especially time to do homework, becomes a volatile family issue. "I don't have the time" is often the catalyst for intense family "discussions." By teaching the parents practical time management ideas that are useful and workable, the parents, in turn, will be equipped to work with their children and teach them to utilize the strategies for better time management. Both the parents and the children will find special rewards and benefits.
## WHAT ARE YOUR TIME "ROBBERS?"

<table>
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<tr>
<th>Problem for me</th>
<th>Often a problem</th>
<th>Seldom a problem</th>
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### Planning

1. Not setting goals
2. No daily plan
3. Priorities unclear or changing
4. Leaving tasks unfinished
5. "Fire fighting," or crisis management
6. No self-imposed deadlines
7. Attempting too much - unrealistic time estimates

### Organizing

8. Personal disorganization/cluttered desk
9. Duplication of effort
10. Confused responsibility and authority
11. Multiple bosses

### Directing

12. Doing it myself
13. Involved in routine details
14. Ineffective delegation
15. Lack of motivation
16. Not managing conflict
17. Not coping with change
### Controlling

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<td>Lack of self-discipline</td>
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<td>21.</td>
<td>Too many interests</td>
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<td>22.</td>
<td>Mistakes/ineffective performance</td>
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<td>23.</td>
<td>Inability to say &quot;no&quot;</td>
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<td>24.</td>
<td>No standards, progress reports</td>
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<td>25.</td>
<td>Incomplete information</td>
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### Communicating

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<td>For Homemakers Only</td>
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<td>35.</td>
<td>Poor planning of errands and shopping</td>
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<td>37.</td>
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| 38. | Family appointments  
  (doctor, music lessons, etc.) |
| 39. | Children's interruptions |
| 40. | Chauffeuring children |
| 41. | Inability to say "no" to volunteer requests |
| 42. | Looking for family's misplaced items |
| 43. | Perfectionism |
| Others |   |
TIME MANAGEMENT SELF-RATING

Name: _______________________________ Date: ________________

How effectively have you managed in the following areas:

1 = ineffectively
2 = occasionally effectively
3 = means okay
4 = effectively
5 = very effectively

Read each item and place the number on the line provided that best assesses how effectively you have functioned.

1. I am able to make decisions. ______
2. I am able to take full responsibility for financial matters. ______
3. I can take care of minor home repairs. ______
4. I have established a system to manage my time. ______
5. I can keep within a budget. ______
6. I have established a system to manage my money. ______
7. I can find solutions to my personal problems. ______
8. I can discover my skills and develop them on my own. ______
9. I am able to ask for assistance when I need it. ______
10. I am able to change plans when I have to. ______
11. I am able to face tomorrow. ______
12. I can accept another's decision when it is different from mine. ______
13. I am able to face 5 years from now. ______
14. I am able to accept criticism of myself. ______
15. I can assert my opinion when I feel I am right. ______
16. I am able to make suggestions which I think are important. ______
17. I can set my priorities.  
18. I am able to set up long-range goals.  
19. I can evaluate my work realistically.  
20. I can recognize what is easy and what is difficult for me.  
21. I understand the demands of work and know I will meet them.  
22. I am able to relax when I get tense.  
23. When things go wrong, I have confidence I can cope.  
24. When I feel depressed, I am able to determine the cause.  
25. I feel that my appearance is viewed by others.  
26. I view my ability to find a job.  
27. I view my ability to find a job I like.  
28. I can manage my life.
GAINING TIME BY KNOWING YOURSELF

Questions to ask about yourself:

1. Have you identified the most important tasks and responsibilities of your job?

2. List those things which should be done daily.

3. Determine those things that contribute most to success.

4. What do you get paid to do?

5. What things do you really like to do?

6. Should you be doing them?

7. Do you drag them out to fill time because you enjoy them and because they make you feel secure?

8. What can you delegate?

9. What can you do smarter?

10. What tasks do you dislike the most?
11. How much time do you spend planning:
   A. The day
   B. The week
   C. The month
   D. Long range planning

12. When do you work best:
   A. Prime time

13. Do you know how to catch your momentum?

14. How do you use miscellaneous time?

15. How do you use leisure time?
BARRIERS TO IMPROVING THE USE OF TIME

A. No real concern for the value or use of time

B. Before analyzing the present use of time, quickly stating that time problems are the result of the system

C. Failure to understand or designate the key functions in the job

D. Fear
   - of change
   - economics
   - exposing lack of job skills

E. Lack of discipline and control
TIME MANAGEMENT

I. Communication
A. Ask for help - people cannot read minds
B. Do not yell!
C. Persist in all communication - giving up means losing out
D. Give CLEAR instructions
E. Explain jobs in terms of work not person doing the job
F. GOAL: Better time management for YOU

II. Delegation
A. ASK - communicate your need
B. Let family do chores - THEIR WAY
C. DON'T be critical - once done, forget it; no perfection here
D. Compliment completed job
E. Develop attitude that it is natural and expected for family to help

III. When There Is Too Much To Do
A. We don't plan properly
B. Don't be unrealistic about how long some things take to be done
C. Haven't set priorities or made needed decisions
D. Trying to impress someone or ourselves
E. Afraid to say NO
F. Have allowed the boss or family to be too demanding without doing anything active about correcting it

IV. Crises Management
A. Plan flexibility into your day
B. Anticipate the unexpected as well as the expected
C. Identify a REAL crises - don't over react
D. No perfectionism, no procrastination
E. Have a back-up BEFORE crisis occurs (extra babysitter, food, medicine, etc.)

V. Overcommitting
A. Realistic plans and priority setting
B. Ask two questions: WHAT IS THE BEST USE OF MY TIME? WHAT WILL HAPPEN IF I DON'T GET THIS DONE NOW?
C. FORGET superwoman
D. Practice saying NO
E. Communicate problem to others - solicit their ideas
VI. To-Do-List

A. Do it now - first or last thing of the day
B. PLAN TIME INSTEAD OF WORK
C. Give each chore a time frame
D. Leave spaces for the unexpected

VII. Flexibility

A. You cannot organize OTHER PEOPLE'S TIME - ONLY YOUR OWN!
B. Planned flexibility gains control of your time

VIII. Morning Madness

A. Most people have ROUTINES, not PLANS
B. Questions of the morning - WHAT CAN I SKIP?
C. Spot your peaks and valleys
TEN STEPS TO EFFECTIVE TIME MANAGEMENT

1. Recognize and treat time as a scarce resource.
2. Operate on the assumption there is never enough time.
3. Be aware of how the forces within you dictate time use.

* habits
* attitudes
* perceptions
* values
* experiences
* emotions
* health

4. Be conscious of where your time is presently going
5. Determine your short term and long term professional goals.
6. Establish what is true job success.
7. Make a daily list showing those tasks and events contributing to points 5 and 6.
   Also, consider those events needed to meet demands.
8. Prioritize your tasks.
9. Build in planning and thinking time on a regular basis.
10. List the biggest time wasters and develop a plan of attack for each one.
TIME MANAGEMENT STRATEGIES

1. 80% of your best work is done in the first 20% of the time you spend on a task.

2. Use "sprinting" - pick a few days and start early - go late with all the speed and enthusiasm you can muster.

3. Avoid procrastination: when you leave a project, map out what the next step will be and jot it down. You'll find it's so much easier to return to the next time.

4. Set deadlines.

5. Generate momentum - set a time limit and do some routine parts of the project FIRST. Use an alarm if necessary.

6. Reward yourself AFTER completion of a task - procrastinators tend to avoid tasks by doing something they like first.

7. Pick one task a week on which to improve - decide when you will have success, make a plan, and explain it to all involved. Break down your plan into action steps (daily goals) and build in rewards when you get to the final goal.


9. Set your watch ahead.

10. Have some "quickie" tasks available for spare moments.

11. Schedule meetings with yourself (write it down!)

12. Turn a negative into a positive - instead of worrying about a broken glass, for instance, say something like, "I never liked that one anyway" or "Now I won't have to wash it" or "Now I have an excuse to clean the floor which I've been trying to do for a while."

13. DON'T try to move BOULDERS - break them down into rocks or find rocks to move instead or go around the boulder or go where there are NO BOULDERS, only rocks!

14. Develop a time philosophy - What is your time worth to you? Is it yours to waste if you want? How do you measure time? What are your time horizons? Is time important to you?

15. Set priorities - get organized!

16. Put high priorities first. WHY? We often use valuable time in attending to low priority and sometimes easier tasks because they seem more manageable. Know when you do your best work and use time wisely.

17. Subdivide large tasks into smaller ones.
18. Build a comfortable working atmosphere - a comfortable physical atmosphere! Have a workable but convenient and comfortable layout that includes pleasant lighting and nice furniture.

19. Know when and how to say NO!

20. Learn to delegate.

21. Avoid perfectionism - too time consuming and too much repetition!

22. DON'T OVER COMMIT - know when NOT to volunteer your time; it is precious!

23. Don't over schedule - track your time usage; be realistic.

24. LISTEN TO YOUR INNER VOICE - It's your best guide.
AN APPROACH TO ANALYZING AND CONTROLLING YOUR ACTIVITIES

DIVIDE YOUR ACTIVITIES INTO THE FOLLOWING CATEGORIES:

1. Those duties that are essential for you to do every day.

2. Those activities that are essential at definite stated intervals.

3. Those that are essential, but come up at unpredictable times and take unpredictable amounts of time.

4. Those activities that are advisable and important if one has the time to do them.

5. Those items that may come up as emergencies.

6. Those problems and duties that require time in planning, thinking, and problem solving.
## ACTIVITY CLASSIFICATION WORKSHEET

<table>
<thead>
<tr>
<th>Every Day Essential Items</th>
<th>Intervals-Essential Items</th>
<th>Unpredictables-Essential Items</th>
<th>Advisable If and When</th>
<th>Emergency Activities</th>
<th>Planning &amp; Thinking</th>
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<td>30</td>
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</table>
10 QUICK WAYS TO MOTIVATE YOURSELF

1. Your goals should be written; long-term & short-term.
2. Review these goals each day and list all ideas that result.
3. Think only on what you want to do, not on what you don't want to do.
4. Visualize yourself as you want to be.
5. Use each experience as a lesson and apply what you learn.
6. Be open to new ideas that can apply for better physical, mental and moral health.
7. Influence others with suggestion and yourself with self-talk.
8. Commit inspirational sayings (affirmations) to memory. Use them during the day.
9. Learn to find help for yourself and then pass on the information to others.
10. Be a self-starter and say to yourself DO IT NOW!

* Associations Report, P.O. Box 12802, Salem, Oregon 97309-0802
PROACTIVITY: TAKING CHARGE TO GET THINGS DONE

1. What is the key to accomplish this goal or objective?
2. What obstacles must be overcome?
3. What in your behavior is likely to increase or decrease your progress?

<table>
<thead>
<tr>
<th>INCREASE</th>
<th>DECREASE</th>
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4. What action will you take to increase the likelihood of reaching your goal?
5. What help do you need from others? How will you get it?

<table>
<thead>
<tr>
<th>HELP</th>
<th>FROM WHOM</th>
<th>HOW</th>
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</table>
TIME USE

- SLEEP
- HOUSEHOLD TASKS
- WORK OUTSIDE HOME
- VOLUNTEER ACTIVITIES
- SHOPPING
- RECREATION
- TIME FOR "ME"
- OTHER

HOW MIGHT AN "ENGINEERED" DAY LOOK REMEMBERING TO KEEP TIME FOR YOURSELF?:

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I must be perfect.
Everything I do should go easily and without effort.
It's easier to do nothing than to take a risk and fail.
I should have no limitations.
If it's not done right, it's not worth doing at all.
I must avoid being challenged.
If I succeed, someone will get hurt.
If I do well this time, I must always do well.
Following someone else's rules means I'm giving in and I'm not in control.
I can't afford to let go of anything or anyone.
If I expose my real self, people won't like me.
There is a right answer, and I'll wait until I find it.
# TWELVE OBLIGATIONS

<table>
<thead>
<tr>
<th>Things I Must Do</th>
<th>Order</th>
<th>Time Allotment</th>
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<th>Things I'd like to Do</th>
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COMMUNICATION/LISTENING SKILLS
COMMUNICATION/LISTENING SKILLS

Introduction

Communication and listening skills are included as part of the study skills curriculum to provide information for developing open discussion and good listening for the GED student and his/her family. The reality of the matter is that when the individual family member takes on the task of coming to GED classes and finding study time at home, communication within the family unit must be functioning effectively. When the family member decides to study for his/her GED, changes within the student's household naturally occur. In order for those changes to be positive changes, the lines of communication must be kept open. We certainly do not want the changes to develop into major conflicts that will cause the student to drop-out of GED classes. The student has already dealt with that kind of conflict once in his/her life when the decision was made to drop-out of high school. Our goal is to keep any negative influences to an absolute minimum. By providing our students with a way to understand the communication process, we are fostering good communication skills and family unity, and hopefully, providing our students with a successful way to cope with their time spent studying for the GED.

The benefits for the GED students and their children are tremendous, hopefully life altering. On a personal level, we are teaching the GED family member how to open and keep open the lines of communication with their children and other family members. We are providing a way to develop and maintain honest communication. This certainly can make the family unit closer and more functional. On an academic level, we are teaching ways for positive discussion about school. Our students and their children should be able to share common concerns and joys they are feeling as a result of their academic experiences.

Information is included with this section pertaining to types of behavior: aggressive, non-assertive, and assertive. It is a fact that behavior directly affects communication and listening. If time permits in your own study skills curriculum, try including and working with this information. Follow the presentation of the material with time for discussion.
CHARACTERISTICS OF EFFECTIVE COMMUNICATION

DEFINITION OF EFFECTIVE COMMUNICATION

The message in the mind of the sender is accurately received and UNDERSTOOD in the mind of the listener.

Effective communication is open communication.

It is sincere, honest, truthful, and assertive. It is characterized by a willingness to listen without making judgements or giving advice.

Effective communication is supportive communication.

This communication involves supporting a person in a productive relationship. It does NOT ALWAYS mean approving or agreeing but it DOES recognize the respect, worth, and dignity of others.

Effective communication is positive communication.

Positiveness is shown by the good feelings toward self and others. It is shown by the energy we expend and the time we invest to move a relationship or an interaction FORWARD.

Effective communication shows equality.

Based on the belief that, as human beings, we are all equal (assertiveness), aspects such as equal dignity and equal respect are vitally important. We are all different; we have different abilities, talents, and goals. BUT despite our differences, we have equal worth as human beings. A healthy relationship or interaction cannot succeed when one person constantly communicates superiority to another or seems to dominate. The relationship will eventually suffer.

Effective communication requires empathy.

Empathy means putting yourself in another person's place. Like supportiveness, it does not ALWAYS mean agreement or approval. It DOES mean that we recognize another person's point of view even if we disagree. "I understand" or "I know exactly what you mean" are statements that imply empathy, understanding, and appreciation.

THE EXTENT TO WHICH ALL 5 CHARACTERISTICS OF COMMUNICATION ARE PRESENT IN ANY INTERACTION INFLUENCES THE EFFECTIVENESS. A RELATIONSHIP WILL SUFFER WHEN ANY ONE OF THESE CHARACTERISTICS IS NOT AN ACTIVE FORCE IN COMMUNICATION.
7 STEPS FOR IMPROVING COMMUNICATION SKILLS

1. DEVELOP COMMUNICATION KNOWLEDGE.
   Be aware of verbal/nonverbal communication skills. Learn to listen. This step provides the foundation for the other steps that follow.

2. IDENTIFY AREAS FOR IMPROVEMENT.
   Know your communication strengths and weaknesses. Analyze your communication skills. Identify your areas for growth.

3. ESTABLISH COMMUNICATION GOALS.
   Build an image of the communicator you want to be. Then pursue that goal with enthusiasm and dedication.

4. OBSERVE OTHER MODELS.
   Having met your personal goals, observe others. Listen as they communicate. Notice verbal/nonverbal behavior. Adopt and use positive behaviors; avoid and change negative behaviors. Build a "bank of knowledge" for effective communication.

5. MONITOR PERSONAL COMMUNICATION BEHAVIOR.
   Self-awareness is the key!

6. DEVELOP A SYSTEM FOR CHANGE.
   This step involves developing a system of replacing ineffective communication with appropriate and effective communication. Make your goals for change clear, specific, and realistic.

7. EVALUATE YOUR PROGRESS.
   One of the best ways to do this is to keep a journal. Make note of the way in which you have handled certain situations in your personal as well as your professional life. Particularly notice those communication skills that are positive and seem to be working effectively for you. Make an effort to change those communication skills that are ineffective and are not doing the job!
EFFECTIVE COMMUNICATION SKILLS

You communicate to others through your behavior. Your behavior is comprised of and reflective of your values, beliefs, attitudes, and feelings.

VALUES - Our ideas of right/wrong.

BELIEFS - What we think is true. May or may not be based on logic.

ATTITUDES - Application of what we think is right/wrong, good/bad.

FEELINGS - Emotional responses: trust, anger, love, fear, sadness, joy.

No matter what a person holds as values, beliefs, attitudes or feelings, a listener can learn about them through the speaker’s verbal/nonverbal behavior. The way we communicate to others reflects our feelings and attitudes.
FEELING: Intimidated/insecure

ATTITUDE: "I might as well not even bother to approach my boss with my ideas for the new project. He doesn't really like me anyway. I know he won't listen. So, I'll just keep my thoughts to myself."

BEHAVIOR: DO NOTHING AT ALL!!!
AGGRESSIVE COMMUNICATION

FEELING: Intimidating/powerful

ATTITUDE: "My ideas for the new project are the only ones that count. Everyone else has stupid, ridiculous ideas. The boss shouldn't even listen to them. She's wasting her time!"

BEHAVIOR: Infringe on other's rights by pushing ahead.
FEELING: Responsible, considerate, positive, self-assured.

ATTITUDE: I'll present my ideas for the new project to my boss. I've done some research and some planning. I've got some practical, workable ideas to share with her. We can both benefit from this experience.

BEHAVIOR: When the timing is right, a mature, positive, equally beneficial exchange will take place.
NONVERBAL COMMUNICATION

NONVERBAL: Wordless Communication

Appearance
Clothes, body size, hairstyles, make-up, and jewelry. We make first impression judgements about others based on appearance.

Facial Expression
Smiles/frowns. A person's face reveals all!

Eye Contact
Eyes show feelings that might otherwise be hidden. We are often quite capable of "reading" another's feelings. Eyes are believed to be the most revealing part of the facial area.

Posture
The position of the body: standing, sitting, or walking. Posture communicates a great deal about mood or feelings. A person's posture may even indicate if it is all right to begin a conversation or make a request.

Gestures
Movement of arms, hands, and fingers. Gestures may be used to make a point or to show a speaker's enthusiasm. Besides larger gestures, think of the different messages we communicate; peace sign, OK sign, or crossed fingers.
POSITIVE USES OF NON-VERBAL COMMUNICATION

1. Gain the attention of the listener by looking the person directly in the eye and by giving a firm handshake.

2. Show a genuine interest in what is being said—use proper posture and appropriate gestures.

3. Express your trustworthiness and honesty by a nod of the head, by looking the person in the eye.

4. Express your attitude toward yourself, your message and toward your listener by your attentiveness to their conversation—don't interrupt with distractive body movements.

5. Express your confidence in yourself by your appearance/demeaner.

6. Express your enthusiasm for the job by your appearance, attentiveness and mannerisms.

7. Respect the listener (especially important if for some reason he is hostile or apathetic) by not violating his/her personal zone.

8. Direct attention to other people who may be in the room with you by directing the message to them also.

9. Reinforce your message.

10. Open the lines of communication between you and your listener.
NEGATIVE NON-VERBAL COMMUNICATION

1. Indirect eye contact.

2. Nervous body mannerisms—shifting from foot to foot, clicking a pen or constantly clearing the throat.

3. Poor posture (sitting or standing)

4. Inappropriate appearance/demeanor.

5. Inattention to listener...eyes wandering around the room instead of listening...shifting eyes.

6. Gestures or non-verbal behavior that contradict the oral or verbal message.

7. Intruding on another person's personal space. A "public zone" is defined as two or more people communicating more than 12 feet apart. A "social zone" is 4 - 12 feet, a "personal zone" is from 1 1/2 - 4 feet and the "intimate zone" from 0 - 1 1/2 feet. If you step "into" a listener's personal or intimate zone during the session, you will have violated that person's personal space and you will receive a negative reaction.

8. Leaning away from the listener.

9. Folding your arms in front of the body, commonly regarded as a defensive posture.

10. Inappropriate body scent—foul odor, too much perfume/after shave lotion.
CHECK YOUR BODY LANGUAGE

We can communicate as much with what our bodies say as with what we say in our speech. Below are some examples to think over in assessing how assertive body language is. Mark each one either S or I, after you have thought over the response each action would bring.

S: Satisfactory
I: Improvement needed

<table>
<thead>
<tr>
<th>Assertive</th>
<th>Nonassertive</th>
</tr>
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<tbody>
<tr>
<td>Direct eye contact</td>
<td>Downcast eyes</td>
</tr>
<tr>
<td>Open, relaxed facial expression</td>
<td>Rapid blinking</td>
</tr>
<tr>
<td>Firm voice</td>
<td>Inappropriate smiling</td>
</tr>
<tr>
<td>Emphasize key words</td>
<td>Inappropriate laughter</td>
</tr>
<tr>
<td>Well balanced posture</td>
<td>Biting lips</td>
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<tr>
<td>Relaxed demeanor</td>
<td>Wetting lips</td>
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<tr>
<td>Gesture to emphasize key points</td>
<td>Clearing throat</td>
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<td></td>
<td>Wrinkled forehead</td>
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<td></td>
<td>Very soft speech</td>
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<td></td>
<td>Whine</td>
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<td></td>
<td>Cover mouth when speaking</td>
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<td></td>
<td>Excessive nodding</td>
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<td>Fiddle with glasses, jewelry</td>
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Aggressive

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<tr>
<td>Stare into distance</td>
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<td>Bored expression</td>
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<tr>
<td>Tight-lipped</td>
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<td>Clenched teeth</td>
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<tr>
<td>Rapid speech</td>
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<td>Overly loud</td>
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<tr>
<td>Condescending manner</td>
<td></td>
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<tr>
<td>Pound fists</td>
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<td>Point finger</td>
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THE LISTENING PROCESS

Most of us take our listening skills for granted. We assume that we listen well just because we don't have trouble hearing. Yet each of us has been in a confusing situation because there was a listening breakdown. Such confusion tells us that the listening process is complicated; it is not nearly as simple as we may think it is.

Let's see what you already know about the subject of listening. Read each of the following statements and mark each one either TRUE or FALSE.

1. You can't learn to listen. You are either good at it or not.  
2. Listening requires very little effort.  
3. The words listening and hearing mean the same thing.  
4. Listening involves ONLY your ears.  
5. Listening is an objective process. Your emotions do not affect your ability to listen.  
6. You tend to speak more than you listen.  
7. Good speakers are usually good listeners.  
8. You listen better as you get older.  
9. Your need to listen becomes less after you leave school.  
10. You listen primarily to get information.
BASIC LISTENING SKILLS

I. Purposes of listening
   A. To give and to get information (informative listening)
   B. To participate in social situations
   C. To analyze and to judge persuasive messages (critical listening)
   D. To share feelings (sensitive listening)
   E. To enjoy yourself (creative listening)

II. The listening process
   A. Receiving
      1. Hearing
      2. Seeing
   B. Interpreting
      1. Uses own experience
      2. Understanding speaker's message
   C. Evaluating
      1. Connecting messages to feeling and ideas
      2. Decision to agree or disagree
   D. Responding
      1. Sending a response
      2. Verbal/nonverbal response
GUIDELINES FOR GOOD LISTENING

1. Watch nonverbal clues: gestures, facial expressions, eye contact, voice.

2. Try to see things from the speaker's point of view. Whether or not you agree with another person is not the issue. You will be a better listener if you try to understand what is going on. Good listeners try to put themselves in the speaker's shoes.

3. Avoid distractions. CHOOSE to pay attention.

4. Listen for the new and unusual. Pay attention, change pace with your speaker, and keep up with the conversation.

5. Listen for repetition. Repeated information is remembered information. Good listeners CREATE opportunities for repetition by asking the speaker to repeat. Hearing information more than once helps fix it in your mind. ASK for repetition.

6. Get prepared! Good listeners make an effort to clear their minds so they can concentrate on the speaker's message. If a listener cannot clear his/her mind, he/she will miss important information.

FOR FORMAL LISTENING IN A FORMAL SITUATION:

Arrive on time.

Sit where you can see and hear the speaker.

Get any notetaking material ready ahead of time.

7. Respond to the speaker. Good listeners find a way to show the speaker they have received the message (verbally as well as nonverbally).

8. Apply the ideas to yourself. Ask yourself this question, "How does this relate to my life?" You MUST connect the speaker's message to yourself. That is YOUR job as the listener!

9. Look for structure. Structuring or ordering of information keeps listeners from getting "lost." Watch for "first, second, third, etc." or any other structured or ordered directive. Listening for structure allows the listener to follow what is said more easily.

10. Review and preview the main points. Careful listeners constantly review the points a speaker has made. This review process keeps the listener ACTIVELY in touch with the speaker.
LISTENING TO OTHERS

1. In order to listen, we must first stop talking.

2. Learn to empathize.

3. Try not to react with negative, non-verbal messages.

4. Concentrate on words, feelings, ideas; tune in, not out.

5. Show interest by giving full attention through eye contact, avoid giving the impression something else demands more attention.

6. For the moment, set aside any other problems and/or emotions. Anger or other emotional reactions can impede the listening process.

7. Focus on the main points.

8. Share responsibility for communication. Remember that good communication is two-way, not one-way.

9. React to ideas, not to the person.

10. Don't argue mentally. This sets up barriers and prevents listening.

11. Use the difference in rate between speaking and thinking. Anticipate what will be said; think over what was said; try to search for meaning and formulate questions.

12. Listen for what is NOT said. Perhaps what is avoided is an important clue.

13. Don't antagonize the speaker by arguing, criticizing, or asking too many questions too soon.

14. Listen for the speaker's personality to surface. Be aware of values, concerns, motivations, interests, likes, and dislikes.

15. Check comprehension by paraphrasing to be sure the lines of communication are moving in the same direction.

16. Avoid hasty judgements.

17. Evaluate reasoning, facts, and evidence.

18. Watch for selective perception (the tendency to notice only a part of what is being said). The part of the conversation that is most interesting often receives the most attention. Make an effort to get and to understand the whole meaning.
LISTENING INVENTORY

1. I am most satisfied with my listening skills in the following situations (s):

2. I am least satisfied with my listening skills in the following situations (s):

3. I have to work very hard when I listen to:

4. I enjoy relaxing and listening to:

5. I wish I were a better listener in the following situations (s):

6. The type of speaker comments that turn me off immediately are:

7. The type of speaker comments that keep me interested are:

8. The nonverbal speaker characteristics which make a person easy for me to listen to are:

9. The nonverbal characteristics which make a person difficult for me to listen to are:

10. I listen to get basic information in the following situation (s):

11. I listen to analyze the speaker's message in the following situation (s):

12. I am willing to respond to a speaker with questions when:

13. I am not willing to respond to a speaker with questions when:
14. I believe I could be a better listener if I:

15. One personal goal I have in the area of listening is:
Although no one is a perfect listener, each of us can be a far better listener and a more productive listener if we work at it. DON'T TAKE YOUR LISTENING ABILITY FOR GRANTED. Work to improve your listening skills and your listening ability and enjoy the benefits of your improvements.

THE HARD WORK OF LISTENING IS WORTH THE EFFORT. MAKE A GOOD LISTENING HABIT A LIFETIME HABIT.

A conversation

When you and I are talking together
I hear your words,
I hear the sounds of your voice.
I see your eyes thinking, questioning, understanding.
I see the way you sit and stand and move.
I think about what you say.
I wonder if you are saying what you mean.
I wonder what you want me to say to you.
When you and I are talking together,
I see,
I hear,
I think
Much more than I could ever tell you.

Cindy Herbert
BASIC LISTENING SKILLS

I. Positive listening

A. Change

B. Repetition

C. Application

D. Thought speed

III. Using listening strategies

A. Visualization - create mental pictures

B. Association - connect the familiar with the unfamiliar

C. Chunking - listening for large sections

D. Focusing - identifying what is the most important
LISTENING SKILLS TO INCREASE EFFECTIVENESS

Whether you are listening to a dinner table conversation, a formal speech, or a directive from your boss, you need to have the skills to figure out the main point the speaker is making. You need to be able to recognize how the points relate to each other and to you, the listener.

To examine just how well you listen for main points and organization, read each of the following statements and answer TRUE or FALSE.

1. I can listen to a friend and realize later that I did not get the point of the conversation.
2. I can listen to the boss's orders and wonder what is important and what is not.
3. I can listen but discover that I missed some of the main points.
4. I can listen to a speaker tell a story and not understand how it connects to the rest of the speech.
5. I can listen to speakers and not be able to tell when they are moving from one main point of the speech to the next.
6. I can listen to a speech and think that the first ideas do not tie into the other parts of the speech.
7. I can listen to a speech and think that the solution does not really solve the problem the speaker presented.
8. I can listen to another person speak and think, "So what am I supposed to remember?"
9. I can get the point of a speech more easily if the speaker gives me "signposts" or clues that indicate which are the main ideas.
10. I can listen to a speaker and think, "I could have given a clearer talk in half the time!"
An Anonymous poem on this subject appeared in the book:  
*Care of the Mentally Ill*

LISTEN

When I ask you to listen to me  
and you start giving advice  
you have not done what I asked.

When I ask you to listen to me  
and you begin to tell me why I shouldn't feel that way  
you are trampling on my feelings.

When I ask you to listen to me  
and you feel you have to do something to solve my problem,  
you have failed me, strange as that may seem.

Listen! All I asked, was that you listen.  
Not talk or do—just hear me.  
Advice is cheap: 10 cents will get you both Dear Abby and Billy Graham in the same newspaper.  
And I can do for myself; I'm not helpless.  
Maybe discouraged and faltering, but not helpless.
AGGRESSIVE BEHAVIOR

Acting aggressively is an ineffective way of communicating. A person who responds aggressively violates the rights of others and may think the only way to get her/his point across is to yell, be sarcastic, or humiliate the other person in some way.

The aggressive individual does not feel good about her/himself. In order to feel better, she/he puts others down in either a blatant or subtle manner.

There are two kinds of aggressive behavior: direct and indirect. The purpose of both is to dominate, humiliate the other person in some way. Direct forms of aggression are obvious, including yelling, blaming, and calling names. Indirect forms of aggression are more difficult in that sometimes one doesn’t know that they have been aggressed against (until later). Sarcasm is a form of indirect aggression.

The aggressive person may exhibit the following characteristics:

1. Inappropriately expressing feelings and opinions.
2. Violating the rights of others.
3. Discounting others, often in a sarcastic way, making one’s self feel more important.
4. Being confrontive, hostile, sarcastic, blaming.
5. Making decisions for others.

Verbal components of aggressive behavior include:

1. Using "you" rather than "I" statements.
2. Using blame and sarcasm.
3. Not taking responsibility for one’s own behavior.
5. Attacking the worth of others.
6. Demanding one’s own way.

Nonverbal components of aggressive behavior include:

1. Glaring or condescending eye contact.
2. Voice tone which is sarcastic, hostile, or unusually loud.
3. Tight facial muscles.
4. Attacking or threatening body posture, i.e., hands on hips, leaning forward, pointing fingers.

Many people continue assertion and aggression. It is important to recognize the difference. Both assertion and aggression involve standing up for one’s rights. It is crucial to note, however, that the aggressive person violates the rights of others, while the assertive person does not.
NON-ASSERTIVE BEHAVIOR

Non-assertive behavior is often a product of the attitude "avoid conflict at all costs." Acting non-assertively is an ineffective way of communicating. A person who is generally non-assertive has difficulty expressing opinions, beliefs, and feelings. She/he does not stand up for her/his legitimate rights and may feel as though she/he is being taken advantage of by others.

The non-assertive individual does not feel good about her/himself. She/he may exhibit the following characteristics:

1. Shyness.
2. Anxiety and nervousness.
3. Discounting her/his own worth as a person and making others more important.
4. Martyrdom.
5. Placing others' wants and needs ahead of her/his own.
6. Allowing others to make decisions for her/him.
7. Thinking of what she/he "should" have said after the situation has passed.
8. Unable to say "no" to an unreasonable request.
9. Feeling guilty if she/he does not say "no."
10. Assuming others instinctively know what she/he wants and will take care of her/his needs. When needs are not met, may feel hurt and angry.
11. Storing negative feelings inside which may result in such physical symptoms as throbbing headaches and queasy stomach, as well as inappropriate verbal explosions.
12. Sending double messages, i.e., smiling when angry.
13. Sacrificing her/his rights or doing favors under the assumption the she/he will be rewarded in some way. However, in this "unspoken bargain," the other person has no idea that she/he is making sacrifices, or that she/he expects anything in return. The "unspoken bargain" is manipulative and dishonest.
15. Making assumptions about how other people feel without checking them out.
Verbal components of non-assertive behavior include:

1. Not stating thoughts and feelings directly and honestly.
2. Discounting one's self and making others more important.
3. Apologizing.
5. Giving into the requests of others.
7. Inappropriately agreeing with others.

Nonverbal components of non-assertive behavior include:

1. Downcast eyes.
2. Negating what one is saying with nonverbal behavior.
3. Shrinking into one's self.
4. Backing off and physically withdrawing.
5. Staying "on the fringe" of activity.
6. Whining, hesitant speech patterns.
ASSERITIVE BEHAVIOR

Assertive behavior allows an individual to stand up for her/his legitimate rights. It involves the ability to express thoughts and feelings in an honest, straightforward fashion that shows respect for the other person.

Basic Components

1. Rights
   Every human being has a right to respect.
   Every human being has a right to express his/her feelings.
   Every human being has a right to express his/her thoughts, opinions, and beliefs.
   Every human being has a right to his/her needs and preferences.
   Every human being has a right to decide when and if she/he will meet the needs of others.

2. Belief System
   It is impossible to be assertive unless you believe you have the right to be assertive.

3. Verbal
   Expressing feelings and beliefs honestly and directly.
   Standing up for one's legitimate rights.
   Expressing respect and empathy for others.
   Using "I" statements.
   Taking the initiative in interpersonal encounters.
   Offering alternatives.
   Accepting responsibility.
   Acting from choice.

4. Nonverbal
   Firm clear voice.
   Good eye contact.
   Appropriate facial expression (congruent).
   Appropriate distance from the other person.

Being assertive does not mean acting assertively all the time. At times, the assertive individual may choose to be a clown, a scholar, a playful child, or a sensuous woman. A person who has truly integrated assertive skills is able to choose how she/he will behave. She/he realizes she/he is not perfect and allows for freedom to make mistakes.

Active assertively often involves taking risks and does not guarantee you "getting your own way." It does, however, help individuals feel good about themselves and provides a sense of control over their world.
**ASSERTIVE BEHAVIOR INVENTORY**

I. Mark each statement as to the amount of difficulty you encounter in trying to deal with the following situations:

0 = no trouble  
1 = a little trouble  
2 = some trouble  
3 = great, or greater trouble

1. _____ Meet strangers and/or start conversation with people you don't know.
2. _____ Speak up in a group.
3. _____ Compliment or express good feelings to someone.
4. _____ Receive compliments or expressions of good feelings.
5. _____ Ask for information (detailed) from a service provider (repairperson, doctor, etc.).
6. _____ Request a favor from a friend or co-worker.
7. _____ Request special consideration from a friend or loved one.
8. _____ Ask for something you want (a raise, promotion, help with chores, etc.).
9. _____ Make complaints about goods and/or services.
10. _____ Make a complaint to a stranger or relative stranger.
11. _____ Make a complaint to a friend, loved one, or co-worker.
12. _____ Receive complaints or criticisms made to you.
13. _____ Let uninvited company know you have other plans for that time.
14. _____ Turn down an invitation or request to do something you don’t want to do.
15. _____ Say “no” to a friend, neighbor, or co-worker who wants to borrow something.
16. _____ Resist pressure from a salesperson.
17. _____ Resist pressure from a friend, co-worker, or loved one.
18. _____ Turn off a talkative person.
19. _____ Admit confusion about a point under discussion and ask whether they can give clarification.
20. _____ Ask whether you have offended someone.
21. ____ Discuss openly with a person his/her criticism of your behavior.
22. ____ Express an opinion that differs from that of the person you are talking to.
23. ____ Resist sexual overtures when you are not interested.
24. ____ Tell someone good news about yourself.
25. ____ Resist a significant person's unfair demand.
26. ____ Quit a job or break a commitment.
27. ____ Request the return of borrowed item(s).
28. ____ Ask a favor of someone.
29. ____ Apologize when you are at fault.
30. ____ Admit fear.

II. Go back and star the three situations that you find the most difficult.

III. Add any situations not listed here that give you trouble.
## Assertive, Non-Assertive and Aggressive Descriptors

### Assertive

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Description</th>
<th>Related Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitive</td>
<td>Discerning</td>
<td>Fulfilled</td>
</tr>
<tr>
<td>Thoughtful</td>
<td>Expressive</td>
<td>Firm</td>
</tr>
<tr>
<td>Just</td>
<td>Participant</td>
<td>Rational</td>
</tr>
<tr>
<td>Communicative</td>
<td>Considerate</td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>Mature</td>
<td></td>
</tr>
<tr>
<td>Open-minded</td>
<td>Strong</td>
<td></td>
</tr>
<tr>
<td>Honest</td>
<td>Composed</td>
<td></td>
</tr>
<tr>
<td>Tactful</td>
<td>Positive</td>
<td></td>
</tr>
<tr>
<td>Reasonable</td>
<td>Nice</td>
<td></td>
</tr>
<tr>
<td>Interesting</td>
<td>Likeable</td>
<td></td>
</tr>
<tr>
<td>Knowledgeable</td>
<td>Persistent</td>
<td></td>
</tr>
<tr>
<td>Initiator</td>
<td>Logical</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel good about self</td>
<td>Knowing what you like</td>
<td>Compassionate</td>
</tr>
<tr>
<td>In tune with things</td>
<td>Express appreciation</td>
<td>Decision maker</td>
</tr>
<tr>
<td>Strength of convictions</td>
<td>In touch with reality</td>
<td>Uses talents</td>
</tr>
</tbody>
</table>

### Non-Assertive

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Description</th>
<th>Related Attributes</th>
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<tbody>
<tr>
<td>Passive</td>
<td>Hesitant</td>
<td>Wimpy</td>
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<tr>
<td>Anxious</td>
<td>Confused</td>
<td>Resentful</td>
</tr>
<tr>
<td>Conformist</td>
<td>Cowardly</td>
<td>Nice</td>
</tr>
<tr>
<td>Unhappy</td>
<td>Fearful</td>
<td>Self-pitying</td>
</tr>
<tr>
<td>Sad</td>
<td>Whiny</td>
<td>Frustrated</td>
</tr>
<tr>
<td>Inhibited</td>
<td>Follower</td>
<td>Indecisive</td>
</tr>
<tr>
<td>Defenseless</td>
<td>Insecure</td>
<td>Weak</td>
</tr>
<tr>
<td>Irresponsible</td>
<td>Worrier</td>
<td>Paranoid</td>
</tr>
<tr>
<td>Lazy</td>
<td>Intimidated</td>
<td>Flexible</td>
</tr>
<tr>
<td>Marshmallow</td>
<td>Not honest</td>
<td>Wishy-washy</td>
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<td>Apathetic</td>
<td>Retiring</td>
<td>Meek</td>
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<tr>
<td>Unsure</td>
<td>Yielding</td>
<td>Gullible</td>
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<tr>
<td>Shy</td>
<td>Nervous</td>
<td>Inferior</td>
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<td>Apologetic</td>
<td>Easily lead</td>
<td>Casper Milque</td>
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<td></td>
<td></td>
<td>Toast</td>
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### Aggressive

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<th>Descriptor</th>
<th>Description</th>
<th>Related Attributes</th>
</tr>
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<td>Bully</td>
<td>Obnoxious</td>
<td>Abusive</td>
</tr>
<tr>
<td>Unreasonable</td>
<td>Unaware</td>
<td>Domineering</td>
</tr>
<tr>
<td>Overbearing</td>
<td>Users</td>
<td>Belligerent</td>
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<tr>
<td>One-sided</td>
<td>Inconsiderate</td>
<td>Abrupt</td>
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<tr>
<td>Demanding</td>
<td>Threatening</td>
<td>Insensitive</td>
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<tr>
<td>Sarcastic</td>
<td>Unfeeling</td>
<td>Know it all</td>
</tr>
<tr>
<td>Ruthless</td>
<td>Boastful</td>
<td>Offensive</td>
</tr>
<tr>
<td>Omniscient</td>
<td>Ego-centric</td>
<td>Inferior</td>
</tr>
<tr>
<td>Unfair</td>
<td>Insecure</td>
<td>Brash</td>
</tr>
<tr>
<td>Nasty</td>
<td>Powerful</td>
<td>Boisterous</td>
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<tr>
<td>Dishonest</td>
<td>Controlling</td>
<td>Opinionated</td>
</tr>
<tr>
<td>Thoughtless</td>
<td>Cocky</td>
<td>Stubborn</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncaring</td>
<td>Mean</td>
<td>Loud</td>
</tr>
<tr>
<td>Rigid</td>
<td>Brooding</td>
<td>Aloof</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Always right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;Mad-Dog&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vigorously energetic</td>
</tr>
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</table>
PROCESS FOR INCREASING ASSERTIVE BEHAVIOR

1. Observe your own behavior. How do you feel about yourself? Are you asserting yourself adequately? Are you satisfied with your effectiveness?

2. Keep track of your assertiveness. Keep a daily journal. Record situations to which you responded assertively, but more importantly, note situations to which you did not respond assertively. Be honest and objective. Don't criticize or judge!

3. Set realistic goals for yourself. Select specific situations in which you want to become more effective. Work toward successes in those areas.

4. Concentrate on a particular situation. Spend a few quiet moments, preferably relaxed with your eyes closed, imagining how you would handle a specific incident (being short-changed at the supermarket or allowing your boss to make you feel degraded over a small mistake). Imagine specific details and how you would feel.

5. Review your responses. Get out your journal and write how you would respond to the two situations mentioned in Step 4. Note your strengths, but also be aware of any behavior that is aggressive or nonassertive. Look carefully at all the components of your behavior.


8. Practice positive thoughts. Practice saying positive statements to yourself. Becoming more assertive may require you to "stretch" yourself, but you can do anything with a positive attitude.
BUILDING EQUAL RELATIONSHIPS

Assertive Acts that Reach Out

1. A warm, firm handshake
2. A hug
3. Sincere warm words:
   Thank you
   You're great
   I'm glad to see you
   You've been on my mind
   I trust you
   I like what you did
4. A warm smile
5. Extended eye contact
6. A gift of love

Assertive Acts that Develop Friendship

1. Be honest; don't allow assumptions to define your relationship
2. Be willing to take necessary risks
3. Be ready to share something of yourself
4. Really listen to what's important in your friend's life
5. Give a gift for no special occasion
6. Ask your friend's advice
7. Simply tell the person you like her/him
8. Clear the air; if you are annoyed or suspect your friend may be, say so! Don't allow annoyances or suspicions to spoil anything between you
TO BECOME MORE ASSERTIVE, WE NEED:

* Some desire to change our behavior.

* A willingness to take some risks, initially in low-threat situations and then, as our confidence and skills increase, in more scary situations.

* A willingness to value ourselves as well as other people.

* A willingness to live with the fact that sometimes we will not get our say.

* A willingness to accept the fact that there is no such thing as a perfect response that will handle every situation.

* A willingness not to demand magic, gimmicks or pat answers to complex situations.

* A willingness to examine ourselves and be open to new ways of thinking and handling situations.

* A willingness to accept the fact that we will not dramatically change overnight.

* A willingness to set small, reasonable goals.

* A willingness to want to be liked by other people -- but to work on not being terribly upset when it doesn't happen.

* A willingness to want fairness and to do everything we can to be treated fairly -- but to work on not allowing ourselves to be excessively upset when it does not occur.

* A willingness to accept the fact that acquiring skills requires effort and practice.

* A willingness to put forth some effort and to practice.
ASSERTIVENESS AT WORK

1. **FORMIDABLE OBSTACLES**
   A. Fear of what supervisor will think
   B. Fear of what co-workers will think
   C. Fear of losing job

2. **JOB SEARCH: ASSERTIVE APPROACH TO CAREERS**
   A. Plan with a clear goal in mind; decide: what, where, and for whom
   B. Seek out activities you enjoy: you'll be more enthusiastic and satisfied
   C. Claim the highest level of skill
   D. Find and meet prospective employer; show how you will fulfill a need in his organization

3. **INTERVIEWING**
   A. **BEFORE**
      1. Prepare yourself thoroughly: mentally
      2. Prepare to emphasize 3 or 4 strengths
      3. Prepare to leave the person with a lasting impression
      4. Practice interviewing
   
   B. **DURING**
      1. Create a friendly atmosphere; approach is important
      2. Remember: most employers want a strong, "contributing to the firm" employee rather than an "outstanding star" who may "outshine" the present staff. (you - "fit-in"!)
      3. Relax!
      4. Let it show that you are prepared; you did your homework; you should know something about the company
      5. Ask good questions (working environment, staff, advancement, employer expectations)
      6. Leave interviewer with something to remember you - make yourself a "stand-out"

   C. **AFTER**
      1. Thank you note
         Add any information that might have been missed
      2. Spend time assessing your own interview;
         What was good? What could be improved?
      3. Constantly continue your search till you finally get the job you want!
4. **AT THE JOB**

   A. Maintain a balance; show you are interested and conscientious, but not "pushy," "bossy," or constantly nagging
   B. Listen carefully; you'll need to listen to learn!
   C. When you do ask questions:
      1. Be direct
      2. Don't start out defensively ("This may sound like a dumb question," etc.)
      3. Focus your questions on specifics
   D. Avoid suggestions about changes; be acquainted with all facets of job first
   E. Avoid - "This is how we did it when I worked at ________ ." (unless specifically asked)

5. **CO-WORKERS**

   A. Honesty first
   B. Don't "sound off" in anger (count to 10 if you have to!)
   C. Listen; everyone has right to his/her opinion, even if you don't agree
   D. Ask yourself "How would I feel in that person's shoes?"
   E. Express your opinions, but remember, they are just that - opinions! Everyone has the same right
   F. Consider exactly what you want - to be the "star" or to get a good job done. Which is important?
   G. Accept responsibility for your mistakes but also accept credit for your successes

**WHAT WOULD YOU DO?**

The woman at the desk next to you chews gum loudly and distractingly. You find her actions and the noise annoying.

6. **SUPERVISORS**

   A. Don't get caught in the trap of coming down on yourself if you are criticized; work to correct the problem; Don't berate yourself
   B. Work assertively to clarify boss's expectations
   C. Work to become more effective; show your boss your contributions are necessary
   D. Don't act like the victim; mumbling to yourself or backbiting will inhibit any progress - you may also make an enemy along the way
   E. Try to identify patterns in your boss's critiques. Ask assertively if that is exactly what the boss wants.
   F. Try to clear up any possible misunderstanding quickly and directly; make future situations more tolerable
   G. Timing is critical:
     - Don't consult your boss in front of others
     - Don't consult your boss when he/she is preoccupied with another problem
     - Do try to gain a favorable audience
     - Do try to schedule uninterrupted time to discuss any problem
WHAT WOULD YOU DO?

- Your boss is making unreasonable demands on your time without offering additional compensation
- You are being unfairly criticized for the quality of your work
- Your boss is asking you to do jobs which you believe are his/her responsibility
- Your boss expects you to prepare "phony" expense accounts

GENERAL GUIDELINES FOR SUPERVISING ASSERTIVELY

1. Build your managerial foundations on honesty, responsibility, cooperation, teamwork, and mutual respect
2. Listen and pay attention to what your employees have to say
3. Work with your staff
4. Find out firsthand what is needed
5. Remember - we're all equal
6. Make instructions clear and direct
7. Accept the responsibility that goes with leadership, including decision-making
8. Criticize fairly - focus on the performance, not the person
9. Praise often
10. Both lead and support your staff

WHAT WOULD YOU DO?

- One of your employees has made a workable, thoughtful proposal for a new work procedure. The idea is terrific but will possibly be vetoed by the general manager because of its start-up costs.
- An employee under your supervision is not working up to your standards. You wish to improve his/her performance.
- Performance reviews are due next week. You must critique 2 people whose work is weak in several areas.
VIDEOS
YOU PACK YOUR OWN CHUTE

You Pack Your Own Chute is an uplifting, positive video that we use in our study skills curriculum for self-esteem improvement. The video was written and produced by psychologist Dr. Eden Ryl. What is of particular interest to our GED students in this video is facing and overcoming fears. Dr. Ryl speaks to the issues of unrealistic fears that can keep us from reaching our goals; fears that we create that immobilize us; fears that we all deal with everyday, especially the fear of failure. In addressing the issue of fear, Dr. Ryl provides sound advice for dealing effectively with fear. Our students' biggest fears are the fear of failing the GED test and the fear of coping with the changes occurring in their lives as a result of the decision to study for their GED. Students also have many fears associated with their children's performance at school. The students learn from Dr. Ryl's advice and examples that fear is normal and natural; it is how they cope with these feelings that makes the difference.

In relating this information to their children, our students are now better informed to help their own children understand the fears they face daily, especially in school. As a result of learning from Dr. Ryl's presentation about dealing with fear, our students can help their children cope with feelings of apprehension and insecurity. As our GED students learn to cope and make positive changes, their children will learn to do the same. The information in this video prepares our students to be excellent role models for their children.

After viewing the video, we always enter into a brief discussion of how the material presented in the video applies to our students' apprehensions associated with their GED studies. You Pack Your Own Chute is an inspiring video that is guaranteed to raise the self-esteem of your students and to make them feel secure and positive about their GED experience.

* You Pack Your Own Chute, a 16 mm 30 minute color film produced and distributed by:
RAMIC PRODUCTIONS, Newport Beach, CA
WINNERS: SUCCESS STORIES SERIES

**Winners: Success Stories Series** is a 30 minute video program depicting the success stories of three GED students who were all nominated for the 1989 PA Adult Student of the Year. This video is inspiring and uplifting. It gives our students the opportunity to see the actual successes of people just like them; people who overcame barriers and won. The video is a production of WPSX, The Pennsylvania State University. We consider this "required viewing" for all our GED students. It gives our students a sense of purpose, and it vicariously provides them with a sense of their own self-esteem and success.
SUCCESS IN THE CLASSROOM

Success in the Classroom is a 30 minute video prepared by Cambridge Career Products. It is subtitled "Effective Study Skills" and covers the following study areas: listening skills, notetaking, outlining, organization and management of homework, and textbooks: SQ3R method. This video provides effective, useful information for our GED students, and they can share this practical information with their children. Not only will these study skills improve our GED students' studying, but they will also help every family member who is in school to study more effectively.
FOLLOWING DIRECTIONS
**FOLLOWING DIRECTIONS**

**Introduction**

Following directions is an essential life skill as well as an important study skill. That is one important reason we include a special section on following directions in our Study Skills curriculum. Our students enjoy these activities. They are not difficult to do, but the directions need to be followed explicitly for the student to attain the correct results. The activities are thinking activities. They involve concentration and paying close attention to what is asked. Besides promoting the basic purpose of following directions, these activities will also promote excellent class interaction. Our students enjoy doing the activities and then comparing answers and results. Any time the result of a study skills activity is increased communication, we are providing our students with an important extension of that activity. We hope you will find the following directions activities as interesting and as fun for your students as we do for our students.

As an additional extension of this activity, your students can take these worksheets home and do them with their children. The same results can be achieved for the children as for your students: concentrating, paying close attention to directions and details, and using critical thinking skills. In doing these following directions activities, your students and their children will be provided with the opportunity for increased communication and a lot of the same enjoyment and fun your students had doing these activities with their classmates.
ACTIVITY *

Read the following sentences. Then follow the directions as they are given below the ****. When making any changes, always go back to the way these sentences are written.

1. The giraffe lived in the zoo.
2. A traffic light was placed at the busy corner.
3. His automobile wouldn't start in the cold weather.
4. He had a 12-inch TV screen.
5. The pretty school nurse sent the sick child home.
6. The last touchdown was made 2 minutes before the football game ended.

(Always go back to the way these sentences were written when making any changes.)

* * * *

You are to rewrite the above sentences on a separate sheet of paper. Make the following changes as you go along.

1. Take out the second word in Sentence 1 and put in the second and third words from Sentence 2.
2. Take out the second word in Sentence 3 and put in the second word from Sentence 1.
3. Take out the fourth word in Sentence 4 and put in the sixth word from Sentence 6.
4. Take out the second, third, and fourth words in Sentence 5 and put in the tenth and eleventh words from Sentence 6.
5. Take out the last 2 words in Sentence 4 and put in the second word from Sentence 1.
6. Use the first 5 words from Sentence 6. Then add the last 4 words from Sentence 2, the last 4 words from Sentence 3, and the last 3 words from Sentence 1.
7. Write 1 more sentence, using the words "traffic light" and 4 other words.
8. Write another sentence, using the first 2 words in Sentence 6 and the last 2 words in Sentence 3. Your sentence cannot have more than 8 words in it.

**ACTIVITY**

Follow the directions for punctuating and correcting the spelling in the paragraph given below.

tim was a great guy he lived close to me when we were kids his mother used to make the best cookies cakes and homemade bread tim and i would sit on the porch steps and smell all those good things coking then mrs. leahy would give the screen door a push and out she'd come with milk and cake or bread back in those days it didn't seem as if tim and i had much more to worry about then seeing who could eat the most of mrs leahys delichus cooking now that tim and i are grown up we ve got plenty to worry about --like how to make a living.

** ***

1. Capitalize all the following: "Tim" each time it is used; "I" when it is used by itself; Mrs. Leahy.

2. Correct the spelling for "cooking" the first time it is used and correct the spelling of the last word in Line 7.

3. Put an apostrophe after Tim's Mother's name as it is used in Line 7; put an apostrophe where it is needed in Line 8.

4. Put periods after these words: guy; kids; homemade break; cooking where it has been misspelled; cake or bread; cooking where it is spelled correctly.

5. Capitalize the first word that comes after the places where you have put periods.

6. Place a comma between cookies and cakes.

7. Using a separate sheet of paper, copy the above paragraph and include all your corrections.
Follow the directions given below for completing this page.

1. 342  2. 795  3. 532
   536  438  146

1. Add the first problem after you have placed an addition sign next to the bottom number.

2. Subtract the second problem after you have put a minus sign next to the problem.

3. Put a minus sign next to Problem 3 and subtract the smaller number from the larger number.

4. In the following problem reverse the two top numbers and multiply.

   74
   x36
   Write your answer above the word "ACTIVITY"

5. 74583492674982784987389328

Cross out every third number. On the above line rewrite the numbers you have left. Now cross out every fourth number. On the line below rewrite the numbers you have left.

6. To the left of the numbers you have left write down any of these numbers that can be divided by 2.

   547863924976

7. Do not use the line directly above for anything. Put the numbers that are divisible by 2 on the line you have been given in No. 5.

8. The numbers you have written are in a horizontal position. On the back of this paper put them in a vertical position.

9. Add up all the numbers that are now in a vertical position.

10. Multiply that number by 2.
Louisa decided to make chocolate chip cookies. The girl needed flour, sugar, eggs, baking powder, salt, vanilla, butter, and chocolate chips. First she had to mix the butter and sugar until they blended. Then she added the egg. Next came the flour and baking soda. The last things she put in were the chocolate chips and vanilla. Louisa set the oven for 350 degrees and baked the delicious cookies for 10 minutes. What a wonderful batch of cookies Louisa made! Everyone really did love this incredibly good recipe for cookies that tasted delicious and looked like they were made from Louisa's favorite recipe.
ACTIVITY (CONTINUED)

Now use the words below to fill in the blanks you have in the paragraph you've written.

1. She'd 13. Later 25. Incredible
5. Explosives 17. In 29. Horrible
8. Began 20. Her 32. As if
10. Egg shells 22. Burned 34. Worst
12. Exploded 24. Weeks
ACTIVITY

NAME:

Follow the directions to fill in the blanks on the next page.

BLANK 1: Write the first name of any relative who lives out of town.

BLANK 2: Put 4 "Xs" below 3 "TS" and then make 3 small circles above the word "Name" on this paper.

BLANK 3: Write down the name of your favorite song.

BLANK 4: Using only 4 numbers, make up an addition problem. The answer cannot total more than 350.

BLANK 5: Write a word that starts with "C," but that has no more than 6 letters in it.

BLANK 6: Write the name of any teacher you had before 2 years ago.

BLANK 7: Write down 6 letters that are in the first half of the alphabet, but that are not vowels.

BLANK 8: Use a dictionary to locate 10 words of which you do not know the meaning. On the back of this paper write down a definition for the third word in your list.

BLANK 9: Write your mother's first name backward.

BLANK 10: Put down the name of the person you'd most like to be if you didn't have to be you.

BLANK 11: Put down what you think are the correct answers to these questions.

   A. The number of holes for laces in jogging shoes.
   P. The number of circles for dialing on a telephone.
   C. The number of pounds you weighed at birth.
   D. The height of the tallest person in class.
   E. The year President Lincoln was shot.

BLANK 12: Put down the year when you were/will be 25 years old.

When you have finished filling in the blanks on the next page, fold this paper in half. Then fold it in half again, making sure the width does not change. Write your name in 3 different places. In one place put only your first name. In another place put your last name. In another place put your first, last, and middle names. Give the paper to the teacher one minute before class is over.
LISTENING, TAKING NOTES,
OUTLINING
LISTENING, TAKING NOTES, OUTLINING

Introduction

This section of our study skills program is included to emphasize listening skills and notetaking. Listening - General Information provides our students with some basics about the importance of listening and its connection to critical thinking. "Listening - General Information" is first addressed when we enter into this part of our study skills. Once this foundation for the importance of good listening skills is established, we have found that our students are particularly receptive to any and all information that follows.

Listening and Taking Notes provides some very practical, basic information. The suggestions are presented in a simple, straightforward way that is easy for the students to understand. Most importantly, the suggestions are usable! There certainly isn't anything worse than giving our students information that is fine in theory but can't be used in practice. Everything in Listening and Taking Notes is applicable to all areas of study.

Success in the Classroom is an overview (outline) of the video tape. Success in the Classroom covers listening skills, notetaking, outlining, tips for taking down assignments accurately, organization and management of homework, and the SQ3R method of reading. We distribute and review the outline of the tape before we view it. The response from our students to this approach has been quite favorable. Feedback from our students indicates that they feel they are able to absorb more of the information presented in the video since they are already focused on that information and are comfortable with it. Our students also tell us that they find the information easy to understand and extremely useful with their children. One parent observed, "These suggestions are ones that really work!" We are always pleased to hear such positive comments. We hope your students will be as pleased and responsive.
LISTENING - GENERAL INFORMATION

1. **Primary** means by which all incoming ideas and information are taken in by both children and adults.

2. **Study:** Of all time spent in daily communication with friends, relatives, associates, and strangers:

   - 45% time - listening
   - 30% time - speaking
   - 16% time - reading
   - 9% time - writing

**Research Study:** Listening is primary, in that it comes before speaking, reading, and writing in the development of all communication skills.

3. Basic belief that listening is "naturally developed" survives among many educators and teachers. However, another study: Listening is not a set of naturally developed behaviors, and it is not just "paying attention." Listening skills need to be developed to overcome the forces that might affect it at any given time.

   (student's motivation, emotional condition, physical condition)

**Definition of listening:** The process by which spoken language is converted to meaning in the mind.

4. Degree of intelligence vs listening skills:

   - Do students who follow lectures and classroom presentations simply have more intelligence?
   - Are poor listeners less intelligent?

   At this time research indicates that there is absolutely no direct correlation between intelligence and listening. It is unwise for teachers and parents to make a faulty assumption that good listeners are "bright" and poor listeners are "dull."

5. Listening can be connected to critical thinking:

   **Moffett:** "If a reader can translate print into speech - read it aloud as sentences with normal intonation patterns - and still fail to grasp the idea or related facts or infer or draw conclusions, then he has a thinking problem, traceable to many sources, none of them concerning words." The same thing may be said of listening and not comprehending. It is probably a thinking problem. To put listening as a high-level mental activity, critical listening and critical thinking must be employed. Listening skills **CAN** be taught!
6. A framework for developing critical listening skills!

   a. Determine your individual purpose for listening.
   b. Follow any spoken directions carefully.
   c. Carefully follow the teacher's plan of organization.
   d. Note transitional words and phrases.
   e. Follow and use a study guide or outline when the teacher provides one.
   f. Recognize the teacher's main points
   g. Note important supporting details and examples
   h. Follow the sequence of ideas
   i. Keep track of all main points by notetaking and mental recapping.
   j. Learn to differentiate between relevant and irrelevant ideas and information.
   k. Learn to differentiate between fact and opinion.
   l. Draw conclusions from the lecture/presentation
   m. Mentally summarize the teacher's main points.
   n. Relate the teacher's ideas and information to one's own life.

GUIDELINES FOR TAKING CLASS NOTES

1. **General information:**
   a. Passive listening/reading leads to minimal learning; low quality of mental activity.
   b. "Practice" in notetaking will develop the skill. Five to ten minute sessions each day, preferably at the very beginning of the school year, where students read and take notes will begin to develop this study habit.
   c. Notetaking from lectures and reading assignments is beneficial to learning. There is a studied relationship between the completeness of students' notes and their achievement on exams.

   Studies show students recall up to 78% of the information they record, but only 5-34% of the information they did not record. **Benefits:** greater attention to information and a deeper processing of that information.

d. Underlining, or underscoring, (highlighting-yellow) leads to increased recall. In addition to underlining: arrows-idea-idea to show relationships; circles - around new words/forms; boxes - contain related ideas; triangles - development of ideas from main-supp.; marginal comments are also effective. Stars - show important ideas. Questions marks - point out unsupported references. Hearts and flowers - mark emotional language.
  e. Outlining.
f. Summarizing: The values of summary writing
1. One of the best methods for review
2. Improves the student's ability to condense
3. Allows a student to distinguish between main and supportive ideas
4. Aids in recalling main points of reading or listening
5. Allows the development of the ability to organize
6. Permits the development of coherent writing skills
7. Leads to the ability to organize and write complete answers on written examinations

g. Kinds of notetaking and responding skills
Research allows two generalizations: (1) NO single technique or method appears more effective than another (summarizing, outlining, underlining, etc.) A combination of methods is best but (2) any one single method is better than none at all. It makes little difference how important material is identified, just as long as it is identified.
LISTENING AND TAKING NOTES *

1. Reasons for taking notes:
   a. To point out what is important.
   b. To learn to listen and pay attention.
   c. To learn to discern main ideas.
   d. To prove points.
   e. To answer questions which may arise as you study your text and previous notes.
   f. To get ideas for reports, charts, compositions, etc.
   g. To learn to synthesize information (that is, to see relationships between ideas).
   h. To use as a resource for test and exam study.
   i. To make review easier.
   j. To summarize ideas.

2. Rules for listening:
   a. Pretend you alone are being addressed.
   b. Be attentive - that is, don't daydream. If your mind wanders, ask yourself, "What was the last thing my teacher said? How does it tie in?"
   c. Try to guess what's coming next.
   d. Make mental summaries from time to time.
   e. Listen for non-verbal clues.
      (1) Change of voice tone may mean a change of subject.
      (2) Repetition may indicate emphasis.
      (3) A pause may indicate emphasis or a change of subject.
   f. Evaluate the evidence and facts. Do they support the lecture? Do they prove the point?
   g. Watch the speaker.
   h. Note key words, such as:
      (1) transitions - but, however, nevertheless, yet
      (2) emphasis - the important point, we must remember this, to emphasize
      (3) introduction of series - one, two, three, etc.
      (4) comparison - like, similar to, likewise, and
      (5) contrast - in contrast, on the other hand
      (6) summary - finally, in summary, therefore, consequently, thus, in conclusion
   i. Listen to other students when they recite or ask questions.
   j. INTEND TO LISTEN!

3. Guidelines for taking class notes:
   a. Before class:
      (1) Review lecture notes of the previous few days.
      (2) Read the reading assignment on which the lecture is based. Note the main ideas and the terms that will be explained in class.
      (3) Label page with:
         (a) Date: November 18, 1983
         (b) Course: History
         (c) Main topic: The American Revolution
      (4) Have pens and wide-lined paper ready.
      (5) Expect 2-5 pages of notes per class hour.

b. During Class:
(1) Don't be late
(2) Sit up in front.
(3) Don’t doodle or talk to your neighbor.
(4) Write legibly.
(5) Start to listen as soon as the bell rings. Usually important information is
given at the beginning and the end of class.
(6) Don’t distract the teacher, who then cannot make an effective presentation.
(7) Note non-verbal clues.
(8) Label main points, examples, organizational clues.
(9) Distinguish facts from opinion. Put your own opinions in brackets.
(10) Take notes on class discussion, student presentations, etc.
(11) Write notes in your own words.
(12) For speed, develop your own shortened word forms:


<table>
<thead>
<tr>
<th>Word</th>
<th>Shortened Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>individual</td>
<td>individual</td>
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<tr>
<td>=</td>
<td>equal</td>
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<tr>
<td>~</td>
<td>similar</td>
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<td>b</td>
<td>be</td>
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<td>b/c</td>
<td>because</td>
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<td>review</td>
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<td>org</td>
<td>organization</td>
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<tr>
<td>ex</td>
<td>example</td>
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<tr>
<td>civ</td>
<td>civilization</td>
</tr>
<tr>
<td>n/thg</td>
<td>nothing</td>
</tr>
<tr>
<td>s/thg</td>
<td>something</td>
</tr>
<tr>
<td>e/thg</td>
<td>everything</td>
</tr>
<tr>
<td>a/thg</td>
<td>anything</td>
</tr>
</tbody>
</table>

(13) Leave space for additions after each main point and at the end of each page.
(14) Decide if apparently irrelevant anecdotes are really relevant.
(15) Ask questions at the end of class.
(16) Listen especially carefully towards the end of class for summaries and main
points.
(17) Write assignments and teacher’s comments in the left-hand margin. Later
record in assignment book.

c. After lecture:
(1) Talk over your ideas with classmates.
(2) Fill in the missing points or misunderstood terms. You may have to check
your text or ask your teacher.
(3) Review your notes as SOON AS POSSIBLE after class.
(4) Fill in examples and gaps in information.
(5) Check legibility.
(6) Underline important points.
(7) Try to anticipate possible test questions on the lecture.
(8) Underline with pen or highlighter; circle or star for emphasis.
(9) Write a brief summary of the main ideas to clarify meanings and
relationships and to strengthen memory.
(10) REVIEW before you forget the information. REVIEW to keep long-term
memory of the lecture. Educational psychologists have estimated that 75%
of the students forget 3/4 of what they have learned within two or three
weeks if they do not reinforce their recall of information.

4. Taking notes on fiction
   a. Make a list of the characters and their predominant traits.
   b. Underline the character traits of the leading characters and put the initials of the
character in the margin.
c. Jot down the time and place of the story (the setting).

d. Briefly summarize the plot of each chapter.

e. Decide what the conflicts are. That is, does the protagonist find himself in conflict with another character, with nature, with something within himself? Write down the major conflicts.

f. Note a repetition of an image, a phrase, or a term, or a synonym for the term. Underline it. For example:

(1) In The Wizard of Oz the colors yellow (as in "the yellow brick road and green (the emeralds in the land of Oz) are important symbols.

(2) In The Lord of the Flies the author repeats the images of the conch shell, the fire, and the glasses.

5. Taking notes on texts

   a. Begin taking notes after you have finished a section of the reading assignment.

   b. Do not concentrate on obscure, unrelated facts. Try to capture the most significant concepts or the overall ideas and the most important subtopics of the passage.

   c. Alternating between reading and the slower process of determining the important concepts of the selection and then recording them in your notes will serve as an instrument of recall.

   d. If you own the book and thus can mark in it, the following suggestions are practical:

      (1) Make notes on the side margins. For example, a solid vertical line by a sentence or two can denote a major point, whereas a broken vertical line can denote a supporting idea.

      (2) Another system is to underline part of a passage with one line to indicate the main idea, whereas two lines can denote a supporting idea.

      (3) DO NOT UNDERLINE TOO FREQUENTLY. OVER-UNDERLINING IS CONFUSING!

      (4) Use a yellow highlighter to accentuate ideas which deserve review and re-study.

      (5) Use numbers in the margins beside a series of ideas which are enumerated.

      (6) Write notes in the book margins beside the material or in the margins above or below the text. Use your own abbreviations to summarize key points.

      (7) Star (*) major ideas or themes or concepts of supreme importance.

      (8) Write a question mark beside ideas you believe are questionable or open to doubt or debate.

      (9) Place a horizontal dash by anything you do not understand. If your teacher does not explain it during class, ask him or her to elaborate on it as soon as possible. Do not leave portions of your text unexplained. Get your questions answered.

      (10) Summarize important concepts or crucial ideas in the white space at the end of the chapter or on a small slip of paper you can clip to the last page of the chapter.
(11) For your own conclusions or ideas which you have formulated as you have read the selection, make notes and put your initials by them. For instance, you may get an idea for a project from a certain passage, and you should mark it for reference.

e. Formulate questions as you go along. You may wish to use the "divided notebook" technique or the "divided page" technique: \(^2\)

1. To use the "divided notebook" technique:
   (a) Open the notebook on your desk.
   (b) On the left-hand page write your questions.
   (c) On the right-hand page write brief answers or write key words which remind you of the answers. Check your memory by concealing the right-hand side so that the questions are exposed and the answers cannot be observed.

2. To use the "divided page" technique:
   (a) Fold a page into two vertical sections.
   (b) On the first section write the questions.
   (c) Across from the questions, on the second section, write the answers.
   (d) Check your memory by folding the answer column out of sight of by covering the answer column with a blank sheet of paper.


TAICINQ NOTES *

A Typical History Assignment

Ms. Rossi assigned pages 345-358 in the history textbook to be read for homework. She instructed the students to read the material carefully so that they would be ready for the class discussion the next day.

Susan read the material during a half hour break between two of her favorite TV programs. She was quite proud of herself for completing the assignment.

John had talked with Felicia during the week about the study method she had learned from her older sister. Felicia told him that the method helped her understand what she read. John decided to try Felicia's system. It took John an hour to complete the assignment. John felt confident that he understood the material and that he would be able to participate in a class discussion.

Felicia also used her sister's Active Thinking Method to do her homework. It took her approximately one hour to complete the assignment. When she had finished, she did something else. Felicia took notes.

Felicia wrote down every bit of information that might be important. Her notes were five pages long and were written in complete sentences. Because the assignment took two and a half hours, she had to stay up till 11:30 in order to finish her other homework.

Ms. Rossi surprised her students the next day with a quiz covering the assigned reading. Susan received a C on the quiz. "It's pretty easy to pass if you read the assignment," she thought to herself. "No more D's and F's for me!"

John received a B+. He was amazed at how much of the material he had been able to recall.

Felicia breezed through the quiz with an A. She was delighted with her grade, but she wasn't sure she could afford to spend so much time on one assignment.

While most students want to get A's, few students have the time or the desire to spend two and a half hours on one assignment. Taking notes does not have to take an endless amount of time. With a good note-taking system, Felicia could have saved an hour of homework time and still gotten an A.

This information will teach you how to take notes efficiently and effectively. Compare the two lists below to see the difference talking notes can make.

Studying without notes makes it
1. difficult to identify important information.
2. difficult to understand important information.
3. difficult to remember important information.
4. difficult to review for exams.

Studying with notes makes it
1. easier to identify important information.
2. easier to understand important information.
3. easier to remember important information.
4. easier to review for exams.

TWO STEPS TO TAKING GOOD NOTES

There are two basic steps in the note-taking process.
1. Writing down the main ideas.
2. Writing down the details.

THE NOTE-TAKING SYSTEM

Read through the procedure for the Note-Taking System. Do not worry about remembering all of the information. You will have plenty of opportunity to practice each step.

Step 1: Main Ideas

Procedure: Write down the main ideas of the article. In "Newgrange-An Example of Ancient Science," as in most articles and textbooks, the main ideas can be found in the subheadings.

Why: The main ideas represent the most important information in the article. The main ideas provide the frame that holds the information together.

Organization: The main ideas should be written next to the left-hand margin on your note paper. Do not write in complete sentences. Just copy the subheadings from the article.

STEP 2: Details

Procedure: Write down the important details that support each main idea. As you read each section of the article, you must decide which are the most important details that will help you understand and remember the main ideas.

Why: The details provide additional information about the main ideas. If the main ideas are like a frame or the skeleton to make a whole body, the details are like the flesh which fills out the skeleton to make a whole body. Without the details you do not have a complete understanding of each main idea.

Organization: The details should be indented about one inch from the left-hand margin. They should be listed one under the other. Do not write in complete sentences. Just include the key words or phrases. Make sure to include enough details so that you will understand your notes when you look back through them.
Scientists who study ancient civilizations can learn a great deal about the people who lived thousands of years ago. They do this by studying the monuments that these people created. These scientists, called archeologists, have learned that many ancient cultures were not as primitive as people might think. In some cases, the people who lived long ago were capable of creating and building monuments which are quite sophisticated and complex.

A Unique Burial Mound

An ancient structure which reveals a great deal about the people who lived thousands of years ago is called Newgrange. Newgrange is an ancient burial mound. Located on the eastern side of Ireland, just north of Dublin, Newgrange was built around 2500 B.C. The structure consists of a huge mound of earth that is 42 feet high and 300 feet in diameter. The entire mound covers more than an acre of land.

Newgrange is entered through a door on the south side of the mound. The door opens into a low, narrow passageway, 65 feet in length, which leads to the center of the mound. At the center of the mound is a domed chamber. This chamber is 20 feet high and is made of stone. It was probably used as a burial place for the most important people of the tribe. Although the weather in Ireland can be very damp, the chamber is dry, even after 4000 years! The builders of Newgrange had discovered a method of construction that ensured that the center of the mound would stay dry.

WATERPROOFING TECHNIQUES

The chamber in the center of the mound was constructed using a special process to keep it dry. This chamber resembles an upside-down bowl made of rough boulders. The builders started with a ring of these large stones, and then added one ring after another to
the base. With each new layer of stones, the diameter of the circle became smaller and smaller, until finally only a single capstone was needed to form the roof. This process of building the chamber is called corbeling. The outside edges of the stones were slanted downward, and narrow grooves were cut in the stones forming a drainage channel. The entire structure was covered with earth. When it rained, any water leaking through the earth to the stones below would run down the grooves to the base of the mound. Thus, water was kept from leaking into the chamber.

NEWGRANGE- AN EXAMPLE OF ANCIENT SCIENCE

Step 1: MAIN IDEA (from the introduction): Archeologists discover that some ancient people were not as primitive as believed.

Step 1: MAIN IDEA (the first subtitle): Unique Burial Mound

Step 2: DETAILS (from the first section)
* Newgrange-burial mound in Ireland
* built 2500 B.C.
* mound: 42 ft high, 300 ft diameter, covers 1 acre
* door on south side
* low, narrow passageway, 65 ft long, leads to center

Step 1: MAIN IDEA (the second subtitle)

Step 2: DETAILS (from the second section)

Step 1: MAIN IDEA (the third subtitle)

Step 2: DETAILS ( from the third subtitle)
Using Architecture As a Calendar

A small rectangular hole above the door at the entrance of Newgrange puzzled archeologists for many years. At first, they thought that food was dropped through the hole into the passageway for the dead people who were buried in the mound. They later concluded that this theory was wrong.

One of the archeologists suspected that the hole had something to do with astronomy. He discovered that each year on December 21, the shortest day of the year, the first rays of the rising sun would strike the hole above the door. As the sun rose, its rays would shine through the hole and creep along the passageway until the entire chamber was finally illuminated. After seventeen minutes, the light would quickly recede, and the chamber would return to total darkness for another year.

A Lasting Monument to Ancient Science

The builders of Newgrange must have been keenly aware of the sun and the changes in its position throughout the year. As primitive as they were, the people of ancient Ireland knew enough about engineering and astronomy to build a structure that was so perfectly in line with the sun that a chamber hidden 65 feet within it could be touched by the sun's rays one day each year. Perhaps the most amazing thing is that Newgrange still stands after thousands of years as a monument to ancient science.

Step 1: MAIN IDEA (the fourth subtitle)

Step 2: DETAILS (from the fourth section)
COMPARING NOTES

Below you will find a sample page of notes that have been taken from the article "Newgrange-An Example of Ancient Science." Compare your notes with these. Yours should be almost the same. If they are not, make the necessary corrections in your notes. Look back through the article to see what information you didn't include.

Newgrange-An example of Ancient Science

Step 1: Archeologists discover that some ancient people were not as primitive as believed.

Step 1: **Unique Burial Mound**

Step 2: * Newgrange- burial mound in Ireland
* built 2500 B.C.
* mound-42 ft high, 300 ft diameter, covers 1 acre
* door on south side
* low, narrow passageway, 65 ft long, leads to center
* center-domed stone chamber, 20 ft high, still dry today

Step 1: **Waterproofing Techniques**

Step 2: * chamber resembles upside-down bowl
* ring of stones
* built one ring on top of another
* stone rings become smaller going up
* capstone (top stone) formed roof
* building process called corbeling
* outside edges of stones slanted down
* narrow grooves cut in stone
* chamber and passageway covered with earth

Step 1: **Using Architecture As a Calendar**

Step 2: * small rectangular hole above door
* December 21 - shortest day of year
* sun's rays shine through hole
* sun illuminates (lights up) chamber for 17 minutes
* chamber dark rest of year
Step 1: **Lasting Monument to Ancient Science**

Step 2: * builders of Newgrange aware that sun changes position
* knew enough about engineering and astronomy to line up mound with sun
* Newgrange still standing

The Note-Taking Triangle

To help you understand and remember the Note-Taking System, we suggest that you picture an upside-down triangle that consists of three levels. Look at the picture below. You will see an inverted triangle. The top level consists of the main ideas, and the second level consists of details. The bottom section is called the point. You will now learn how to figure out the point of what you have read.

![Inverted Triangle Diagram]

Getting the Point

Look at the illustration of the inverted triangle above. The main ideas and the details lead the reader to the point being made by the author. When taking notes, you start with the main ideas. You then expand your knowledge about the main ideas by writing down the details. This process helps reinforce your memory and your understanding of what you have read.

The third step in note-taking is to summarize the main ideas. This summarization is the point. If you can express the point of an article in your own words, you will be able to
1. understand the information
2. remember the information
3. do better on tests
You will now learn the third step in the Note-Taking System.

Step 3: **Point**

**Procedure:** Write down the point of the material you have read. The point represents the unifying idea or ideas that the author wants to communicate to the readers.

**Why:** The point ties all the facts and information together. It is generally found in the conclusion or summary.

**Organization:** The point should be written at the end of your notes next to the left-hand margin of your note paper.
PRACTICING GETTING THE POINT

Review your notes and write down the point that the author is making in "Newgrange-An Example of Ancient Science."

Compare your summary of the point with the sample below. Your words may be different, but the information should be the same. *Don't be discouraged if you need to rewrite or add to your summary.* With practice, your ability to express the point of what you have read will improve!

**Step 3:** Point

*Newgrange proves that ancient people were not primitive in all ways. They were able to build a monument that was waterproof, functioned as a simple calendar, and was sturdy enough to remain standing for thousands of years.*

**TESTING YOURSELF**

Write down the three steps in the Note-Taking System.

1. 
2. 
3. 

Say aloud the three steps in the Note-Taking system.

Make up a formula using the first letter in each step.

_____ + _____ + _____

Make up a sentence with the first letter of each word.

______________________________

Fill in the inverted triangle with the three steps.
NOTE TAKING PRACTICES

Personal Shorthand  Some teachers speak more rapidly than others, and some spout out more facts than others. In any event, taking notes is a virtue and must be taught to some of our students. Of course, learning a conventional or commercial shorthand system may be best, but many students cannot afford the expense or simply deny the need for such an undertaking. To come to their rescue, a personal shorthand system can be devised and suggested to them. It usually has the decided disadvantage that nobody other than the writer can read it. But for the sake of speed and efficiency in note taking, and possibly in later transcription, here are two systems:

1. The No-Vowel Technique
A simple way of abbreviating notes is to leave out all vowels in a word. While this is a sure way of shortening notes, the reader must be able to read from reduced cues, where the blanks have to be filled in by memory.

EXAMPLE: Ths prarph ws wrtn n th "n vwls" r "rdcd cs" tchnq, tht s t sy l th vols wr lft t (wth th xcptn f th "y"). t mght b smwht dffclt t rd, bt wth sm prctc stdnt wll b bl t rd t.

A different version is simply to use abbreviations, including some of the necessary vowels: "If y cn rd ths, y undrst th messg."

2. Personal Symbols
Another technique for shortening note taking, with regard to space as well as time, is to invent special symbols or adapt existing ones. The symbols may stand for one word, one idea, or a whole sentence. This symbol system is especially advisable when certain words or terms are repeated often. Mathematics and science provide good examples of how special symbols can be used. Here are some suggestions for use in the classroom during note taking exercises:

- psychology  \( y \)  is \( \bullet \)
- Shakespeare  \( Sh \)  or  \( \wedge \)  are \( / \)
- Home Assignment  \( H \)  has \( o \)
- Look up in the Library  \( L \)  or  \( L \)  have \( 0 \)
- Cross Reference  \( H \)  was \( > \)
- larger than  \( > \)  were \( E \)
- smaller than  \( < \)  English  \( E \)
OUTLINING AND WRITING SUMMARIES FOR REVIEW

REVIEWING

Remember the final step in the SQ3R method? Review. Alan Thomas and Alice Jackson both understand the importance of this effective study technique. So before they take a test, they always outline or summarize the test material to help them as they review.

OUTLINING

An outline is useful for organizing textbook material. For in an outline, main ideas and supporting details are clearly shown in a formal structure. There are two types of outlines—the topic outline and the sentence outline. The topic outline is most useful for quick review.

TOPIC OUTLINE

A topic outline in its shortest form might consist of a listing of chapter headings and subheadings, single words, or short phrases. Here is a sample topic outline for a chapter in an imaginary history text.

Chapter Title: Signs of a Recession

I. High Unemployment
   A. Job Scarcity
   B. Layoffs

II. High Interest Rates
   A. Prime Lending Rate
   B. Tight Money

III. Sluggish Market
   A. Depressed Housing
   B. Business Decrease
   C. Decreased Production

Notice how the subheadings are listed beneath their corresponding headings. This outline is helpful, however, only if you remember what each topic is all about. So, while a topic outline can be useful for review, it has its limitations.

SENTENCE OUTLINE

If you're studying material that's difficult and you don't think you'll remember important details without help, you might use a sentence outline instead. In a sentence outline, each topic or subtopic is stated as a complete sentence. When you write a sentence outline, you must carefully think through the material—a step with obvious benefits.

A disadvantage of the sentence outline, however, is that it takes longer to develop. And it's not as easy to use for review.

Here's the same chapter which was outlined earlier in topic form, now outlined in the sentence form.

Chapter Title: Signs of a Recession

I. The percentage of people seeking jobs increases
   A. Fewer jobs become available.
   B. Large companies begin to lay off their employees.

II. High interest rates keep people from spending money.
   A. The prime rate increases, so fewer people borrow money.
   B. Higher interest rates keep businesses from expanding.

III. Major markets slow down because there is less money for buying.
   A. Nobody can afford a high interest loan to buy homes, so the construction business slows down.
   B. Businesses stop expanding which causes fewer jobs.
   C. Production slows because there are fewer people working.

Notice how the sentence outline gives you more information.

EXERCISE 1

Develop a topic outline for a chapter in your history text. Write your outline in the space provided. Then develop a sentence outline for the same chapter, again using the space provided. Which was more difficult to develop? Which is more useful for review? Which will you use for future assignments?
Exercise 2

Read the following Passage. First write a topic outline. Then write a sentence outline. Use the space provided on the next page. Compare your outlines. Which is more informative? Which do you prefer for review?

There are three different kinds of punctuation marks used to indicate the end of a sentence. The kind of end mark used depends on the kind of sentence.

An interrogative sentence asks a question. After each interrogative sentence a question mark is used. Examples: Where does Jonathan live? May I borrow a quarter?

An exclamatory sentence is a sentence that shows excitement or surprise. An exclamatory sentence ends with an exclamation point. Examples: Hey, we won! Wow, I found a treasure!

There are two other kinds of sentences, and both of them end with a period. They are the declarative sentence and the imperative sentence.

The declarative sentence is a simple statement or declaration. Examples: Sheila runs faster than Larry. Alaska is the largest state.

An imperative sentence is one that gives a command or an order. Some examples: I'll have bacon and eggs. Turn in your homework tomorrow.

Writing Summaries

Writing a chapter summary is another effective review technique. For when you write a chapter summary, you summarize very briefly large amounts of information.

In a summary, essential points are written in paragraph or story form, instead of as an outline. Illustrations, explanations, and lengthy comments are omitted. A summary identifies the main points of the original material, but not all of the details.

The steps used in preparing a summary are simple: read, select, write, and compare.

Read the Original

Before writing a summary, you must read the original material. But read very carefully to be sure you understand thoroughly the major concepts.

Select the Details

This is a very important step for the summary includes only the details you intentionally select. You'll want to include ideas that are important, and omit things that are not.
Write the Summary

Write the summary in your own words. Keep it short, for a summary is always shorter than the original. However, the shorter the summary, the greater the danger of oversimplifying information or distorting the facts.

Be careful to preserve the tone and emphasis of the original. Give more attention to a point treated at length than to one mentioned in passing.

Which to use?

Whether you outline or write chapter summaries for review will depend on you and the material you are responsible for.

You might find that a topic outline works for an English assignment, while a sentence outline is needed for biology. And summaries might work best for reviewing your history chapters. Whatever you choose will depend on what works best for you.

Some Final Words

Sometimes, the older you are, the harder it is to break old habits. Be patient with yourself as you work to change your study behavior. Change doesn't come easily. And changing old study habits can be just as difficult as changing friends or jobs or schools.

Remember, too, that all the gimmicks in the world won't make up for a lack of interest in learning. If you're motivated to learn and you have the tools to do so, nothing can stop you from achieving your goals.

Once you've learned the basics concerning good study habits, you'll have many study ideas of your own. Over time, you'll drop some techniques and develop others that work just for you.

That's okay. In fact, it's good. For that would mean you're fine-tuning your study skills to meet your ever-changing needs. And that's what *Making the Grade* is all about.
**MAIN TOPICS AND SUBTOPICS** *

The title, or subject, of this report is "Famous People in History." There are five main topics (main ideas). Each main topic will be shown opposite a Roman numeral on an outline. Each main topic has three subtopics that will be shown opposite capital letters on an outline. Subtopics support a main topic.

Directions: Read all the items first. On notebook paper write an outline. Follow the form as shown below.

<table>
<thead>
<tr>
<th>I. World War II generals</th>
<th>III. Early presidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>George Washington</td>
<td>Omar Bradley</td>
</tr>
<tr>
<td>Early presidents</td>
<td>Jacqueline Kennedy</td>
</tr>
<tr>
<td>Famous first ladies</td>
<td>Hernando DeSoto</td>
</tr>
<tr>
<td>Thomas Jefferson</td>
<td>Douglas MacArthur</td>
</tr>
<tr>
<td>John Adams</td>
<td>Dolly Madison</td>
</tr>
<tr>
<td>Eleanor Roosevelt</td>
<td>Juan Ponce de Leon</td>
</tr>
<tr>
<td>Vasco Balboa</td>
<td>Dwight Eisenhower</td>
</tr>
<tr>
<td></td>
<td>Early explorers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Famous People in History</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. George Washington</td>
</tr>
<tr>
<td>B. Thomas Jefferson</td>
</tr>
<tr>
<td>C. John Adams</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. Famous People in History</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Early presidents</td>
</tr>
<tr>
<td>B. Early explorers</td>
</tr>
<tr>
<td>C. Famous People in History</td>
</tr>
</tbody>
</table>

Note: To prove an outline, repeat the title with each main topic and its subtopics. Does it make a good sentence? If so, the outline is correct.

Proving the Outline
with Titles, Main Topics, Subtopics, and Details

How to Write a Report

I. Select a suitable title
   A. Give clue as to content of report
   B. Limit scope of report
   C. Draw conclusions

II. Determine a plan or a combination of plans
   A. Use a time order
   B. Give explanations
   C. Make comparisons
      1. Show likes and differences
      2. Relate past to present
      3. Develop both good and bad points
      4. Include interviews

III. Preview available material
   A. Skim several sources
   B. Keep developmental plan in mind
   C. Draft skeleton outline - title and main topics only
   D. Write a summary

IV. Make notes as you reread reference materials
   A. Support main topics
   B. Put only one idea on a card
   C. Rewrite the title

V. Draft a complete final outline - a master plan

VI. Follow outline and write well organized report

VII. Place report in a loose-leaf binder

SELECTING MAIN IDEAS OF PARAGRAPHS

Directions: Read the paragraphs below. For each paragraph decide upon a title. Each paragraph has a choice of three titles. Circle the letter of the one title you choose for each paragraph.

1. When a yacht exploded in June, 1971, a South African woman was thrown into the Indian Ocean. Suddenly three dolphins appeared. While one dolphins kept her afloat, the other circled and provided protection. At length the woman came to a marker in the ocean and climbed on top of it. When found by rescuers, she had floated at least 200 miles. Her lifeguards - the dolphins - had miraculously saved her.

   a. Explosion on a yacht
   b. South African woman survives
   c. Dolphins as lifeguards
2. Have you ever heard of a psychic horse? Lady Wonder, as she was called, made several valid predictions. For example, she warned that the United States would enter World War II. Contrary to public opinion she predicted that President Truman would be reelected. She directed police to the body of a missing boy. Lady Wonder punched giant letters on a special type writer to spell out her prophecies. She live to be thirty-one.

a. Lady Wonder, the psychic horse
b. Predictions by a horse
c. A horse that types

3. About every four years when lemmings become scarce, snowy owls move south. They invade areas where mice, rabbits, rats and other rodents are plentiful. Snowy owls’ invasion of cities, farms, and busy freeways often result in a type of death march. Because they seldom, if ever, encounter humans in their northern Canadian habitat, they are unafraid of people. During these periodic invasions, many never live to return to their nesting grounds.

a. Snowy owls' invasion
b. Feeding habits of Snowy owls
c. Canada, home of the Snowy owls

4. Languages of the Choctaw and Navajo Indians provided unbreakable codes in two world wars. During World War I, the U. S. Signal Corps was hampered because secret messages sent by army field telephones were intercepted and decoded by the Germans. Captain E.W. Homer assigned eight Choctaw Indians to special sectors along the front lines. They received all secret orders in Choctaw, one of the least-known languages in the world. The Germans were baffled at last. Again in World War II, the U. S. Marines in Pacific combat zones used Indians - the Navajos- to transmit secret messages.

a. Role of Indians in World Wars I and II
b. Indian languages, the unbreakable code
c. Decoding messages

5. He's been dead for over fifty-five years, and many of his tricks still remain a secret. He could escape no matter how he was locked up, tied up, or chained. Whether locked in jails or bank vaults, he could always escape. He could both tie and untie a knot with the toes of one foot. Once he escaped from a water tank even though he hung upside down, chained by his ankles. Harry Houdini was the greatest escape artist the world has ever known.

a. Secret tricks
b. Houdini, the escape artist
c. How to escape

6. Wolfgang Mozart, a child prodigy, is considered one of the world's geniuses. Before he died at age thirty-five, he wrote many symphonies, operas, and concertos that we still enjoy today. He was born in Salzburg, Austria, in 1756, and began studying music when he was four. He composed minuets at five years of age. When he was six, he played before royalty in capitol cities of Europe. He wrote a complete symphony when he was eight. By the time he was eleven, he was a salaried concertmaster in Salzburg. He wrote two operas and a mass when he was twelve.

a. A world genius
b. Concertmaster of Salzburg
c. Wolfgang Mozart, child prodigy
Placing main topics, subtopics and details in outline form

Directions: Read the whole section carefully. Pick out the main idea of each paragraph. Each main idea will be shown opposite a Roman numeral on the outline.

Dogs in World War II

In World War II members of the K-9 Corps proved their worth in many ways. During the invasion of Sicily as troops were landed, a steady volley of shells exploded on the beach. Chips charged through the heavy gunfire, and suddenly the shelling stopped. An Italian soldier with hands up, and Chips at his throat, emerged from a machine-gun nest. He was followed by two others. That same night Chips alerted the Americans to enemy soldiers who were sneaking up. Altogether fourteen prisoners were credited to Chips. He is the only dog to have ever received the Silver Star medal for bravery.

In the Pacific theater brave dogs served as scouts, messengers, and sentries. As scouts they spearheaded patrols through jungles and could catch the scent of an enemy several hundred yards away. Since dogs are color blind, even snipers covered with green paint and hidden in trees were easily sighted. Each messenger dog carried secret information between his two masters and wasn't stopped by thick jungle grass or enemy gunfire. When rain-soaked radios failed, messenger dogs provided the only means of communication. The dogs also served as sentries and protected men sleeping in foxholes.

PLACING MAIN TOPICS, SUBTOPICS, AND DETAILS IN OUTLINE FORM

Directions: Use a full sheet of notebook paper. Outline the article "Dogs in World War II." Follow the form as shown below. The title, main topics, and details that you will use are given below.

I. ____________________________________________________________________
   Was first dog to receive Silver Star medal
   Provided security
   Dogs served in Pacific theater as sentries
   Dogs in World War II
   Sighted camouflaged snipers
   As messengers

II. ____________________________________________________________________
   Chips distinguishes himself in Sicily
   As scouts
   Carried messages between two masters
   Spearheaded patrol through jungles
   Often provided only means of communication
B. Contributed to success of Sicilian invasion
   1. Went through jungle grass and enemy fire
   2. Charged Italian machine-gun nest
   3. Caught enemy scent several hundreds of yards away

C. Forced surrender of fourteen Italians
   1. Patrolled at night

PLACING MAIN TOPICS, SUBTOPICS, AND DETAILS IN OUTLINE FORM

Directions: Check your outline with the one below. Prove it by answering the questions that follow.

Dogs in World War II

I. Chips distinguishes himself in Sicily
   A. Contributed to success of Sicilian invasion
      1. Charged Italian machine-gun nest
      2. Forced surrender of fourteen Italians
   B. Was first dog to receive Silver Star medal

II. Dogs served in Pacific theater
   A. As scouts
      1. Spearheaded patrol through jungles
      2. Caught enemy scent several hundreds of yards away
      3. Sighted camouflaged snipers
   B. As messengers
      1. Carried messages between two masters
      2. Went through jungle grass and enemy fire
      3. Often provided only means of communication
   C. As sentries
      1. Patrolled at night
      2. Provided security

Proof: The article as a whole is about ______________________. How many paragraphs are in the article? ____________ Is the main idea of each paragraph expressed opposite a Roman numeral? ____________ Does each subtopic support its main topic? ____________ Does each detail support its subtopic? ____________
Placing main topics, subtopics, and details in outline form

Directions: Read the whole selection carefully. Pick out the main idea of each paragraph. Each main idea will be shown as a main topic opposite a Roman numeral on the outline.

Origin of Common Superstitions

Why knock on wood when we wish for something good to happen? It was once believed the air contained evil spirits that could snatch good things away. But a noise would prevent evil spirits from hearing.

A broken mirror brings seven years' bad luck. The first mirrors--ponds--reflected the will of gods. Good images reflected by smooth ponds meant good luck. Ripply ponds distorted images, as would cracked mirrors, and meant the gods would bring bad luck. Because seven equals three and four, it is a powerful number. Originally three people--mother, father, and son--represented trinity that promised continuing life. Trinity eventually grew to mean "spirit of man." The earth's four directions formed a square and represented a house. This house supposedly contained the "spirit of man."

Sneeze and people will say, "God bless you." It was once thought a person's soul resided in his head. A strong sneeze could blow his spirit right out, so a short blessing was usually offered.

Primitive men believed ghosts resided in graveyards because one's spirit remained near where his body was buried. To prevent a ghost's escape, a heavy stone was rolled on top each grave.

Placing main topics, subtopics, and details in outline form

Directions: Use a full sheet of notebook paper. Outline the article "Origin of Common Superstitions." Title, main topics, subtopics, and details that you will use are given below.

I.__________________________________________________________
   A._______________________________________________________
   B._______________________________________________________
   C._______________________________________________________

II.__________________________________________________________
   A._______________________________________________________
      1._____________________________________________________
2. ____________________________  remained near buried body; Origin of Common Superstitions.
3. ____________________________  

B. ____________________________  III. ____________________________
1. ____________________________  A. ____________________________
2. ____________________________  B. ____________________________
3. ____________________________  IV. ____________________________
4. ____________________________  A. ____________________________
5. ____________________________  B. ____________________________

PLACING MAIN TOPICS, SUBTOPICS, AND DETAILS IN OUTLINE FORM

Directions: Check Your Outline with the one below. Prove the outline on the following page.

Origin of Common Superstitions

I. Knock on wood
   A. Air filled with evil spirits
   B. Good things could be snatched
   C. Noise kept spirits from hearing
II. Broken Mirror Brings 7 years’ bad luck
   A. Mirror reflected will of gods
      1. Smooth pond reflected good image and good luck
      2. Ripply pond reflected bad image and bad luck
      3. Cracked mirror distorted image
   B. Seven equals 3 + 4 – a powerful number
      1. Mother, father, son represented trinity
      2. 3 as trinity meant continuing life
      3. Trinity became “spirit of man”
      4. Earth’s 4 directions represented a house
      5. House contained man’s spirit
III. Bless a sneeze
   A. Believed soul resided in the head
   B. Sneeze could blow spirit out
IV. Ghosts in graveyards
   A. Believed spirit remained near buried body
   B. Stone prevented ghost’s escape
Women's Contributions in America's History

The first pioneer women, known as "tobacco brides," arrived in Virginia from England in 1620. Auctioned off to the highest bidder, each one sold for about one hundred twenty pounds of tobacco. Most women became homemakers, farmers, dressmakers, teachers, and businesswomen.

During the American Revolutionary War, women ran the farms, maintained ships and factories to supply the armies, and managed businesses. Some served as soldiers. A few became valuable and efficient spies. Eliza Pinckney developed indigo while she managed her father's plantations. Indigo, a seed that produced a blue dye, became the second largest crop exported from the Carolinas. Martha Custis Washington managed large estates, and she also served with General Washington during the difficult winter at Valley Forge. Abigail Adams spied on the British and passed valuable information to leaders. She was an early advocate of women's rights.

During the westward movement women maintained their farms, homes, and families. They cared for the sick and helped rifleman during Indian attacks. Women also served as missionaries and nuns, aiding both whites and Indians. Life during the harsh winters in poorly built sod houses and log cabins was extremely difficult. Many died at an early age. Several were captured by Indians, never to be heard from again.

Throughout the civil war women made notable contributions in American history. Harriet Tubman, a black woman, conducted escapes by the way of the Underground Railroad. During nineteen trips to the South in ten-years' time, she guided more than three hundred slaves to freedom. A reward of $40,000 was offered for her capture, but she was never caught. Harriet Tubman also served as a scout for the Union Army. Susan B. Anthony led a temperance movement and fought for women's right to vote. Harriet Beecher Stowe wrote an antislavery book, Uncle Tom's Cabin, which had a tremendous impact on people in both the North and South. Clara Barton organized volunteer nurses to serve on the battlefields, and she saved the lives of many soldiers. She also founded the American Red Cross. Pauline Cushman, a Union spy, caught in Louisville, Kentucky, and would have been executed but for the timely arrival of Union troops.

After World Wars I and II women continued to fight for more rights. In 1920 they won the right to vote in national and state elections. After World War II women's rights were advanced still further. For example, women may now retain their American citizenship if they marry a foreigner. More women seek higher educations today, and a larger number are accepted in professions previously held only by men.
Check Your Outline

Directions: Compare your outline with this one.

Women's Contributions in American History

I. First pioneer women, 1600's
   A. "Tobacco brides"
      1. Arrived in Virginia from England
      2. Each auctioned for about 120 pounds tobacco
   B. Homemakers, farmers, dressmakers, teachers, businesswomen

II. During Revolutionary War
   A. Maintained ships and factories
   B. Ran farms and managed businesses
      1. Eliza Pickney
         a. Managed father's plantations
         b. Developed indigo, second largest crop exported from Carolinas
      2. Martha Custis Washington managed father's estates
   C. Served as soldiers and spies
      1. Abigail Adams, president's wife, spied on British
      2. Martha Custis Washington served at Valley Forge

III. During westward movement
   A. Maintained home and families
   B. Ran farms and cared for sick
   C. Helped riflemen during Indian attacks
   D. Served as missionaries and nuns

IV. Throughout Civil War
   A. Harriet Tubman
      1. Conducted escapes by underground railroad
      2. Guided more than 300 slaves to freedom
      3. Scout for Union Army
   B. Susan B. Anthony
      1. Led a temperance movement
      2. Fought for women's right to vote
   C. Harriet Beecher Stowe
      1. Wrote book *Uncle Tom's Cabin*
      2. Strongly influenced the antislavery movement
   D. Clara Barton
      1. Organized volunteer nurses to serve on battlefields
      2. Saved lives of many soldiers
      3. Founded American Red Cross
   E. Pauline Cushman served as a Union Army spy

V. After World Wars I and II
   A. 1920, women won right to vote in national and state elections
   B. Women could retain citizenship if married to foreigner
   C. Women accepted in several male-dominated professions

YOUR outlines will obviously differ somewhat. But let's prove this one. Say, "Women made contributions in American history beginning with first pioneer women in 1600's. During the Revolutionary War, during westward movement, throughout Civil War, and
after World Wars I and II, women made contributions in American history." are the main topics correct? -- Are yours? --

Step-By-Step Procedure for Writing Reports

Decide upon a suitable title or subject.
It must definitely specify what the report will include.
It must not be too broad; it must limit the scope of your report. You are writing a report, not a book.

Select a plan to follow.
Most reports can be developed by following either one or a combination of two plans.
The most commonly used plans include: using a time order, giving explanations, making comparisons, or listing details.

Preview available material by skimming. Make a temporary outline.
As you see what is available, make a temporary outline of main ideas in accordance with the plan that you selected.

Reread all material carefully.
Watch for information that will support main ideas shown on your temporary outline.

Take notes on cards or sheets of scratch pads. About 4"x6" is a good size.
Put only one idea on a card. When you are finished, sort cards or sheets of paper according to the main topics on your temporary outline.

Draft a final outline from which you will write the report.
Study your notes and make a final outline. Add subtopics and details. Be sure to prove your outline by repeating the title with each main idea as shown opposite a Roman numeral. Then see if you can make sentences out of the subtopics and details. (Add a few words of your own.) Do sentences support the main idea -- the main topic? If so, write.
SUCCESS IN THE CLASSROOM *

Effective Study Skills

Listening - Purpose: To gain new information. We spend 1/2 of our lives listening, but most listening skills are underdeveloped.

Listening Skills
1. Prepare to listen
2. Have a Positive Attitude. Be open and receptive to what is being said.
   A. Attitude Blocks
      1. Lack of interest
      2. Dislike for the teacher
      3. Need to be entertained
      4. Lack of emotional maturity
      5. Basic physiological needs that have not been met: hunger, thirst, and sleep!
   B. Dealing with blocks
      1. Listen hard
      2. Deal with info as it is presented. If teacher has a pleasant speaking voice with a quick, sharp delivery, she/he is easy to listen and pay attention to. However, if teacher's voice is dull and delivery is slow, the mind can easily wander and boredom sets in.
      3. Control thoughts and control attention to distractions
         A. Concentrate on what's being said
         B. Try to ignore all distractions
            1. Daydreaming
            2. Noise distractions: papers rustling, pencils dropping, general corridor noise
            3. "Quiet" distractions (noticing something different): hair, clothing, gestures, facial expressions

Notetaking
   5 Critical advantages to good notetaking
   1. Record all important facts and ideas
   2. Tells what's important
   3. Helps students to remember what was learned
   4. Provides a complete outline for review for exams
   5. Helps complete homework

Techniques
1. Use your own words
2. Condense the info whenever possible
3. Rephrase information
4. Use a modified shorthand
   e.g. = for example
   i.e. = that is
   .. = therefore
   w/ = with
   abbreviate words

5. Use a loose-leaf notebook
6. Put date on every page
7. Get to class on time

Outlining
Outline format (simple, efficient, condenses info):

I. Main Idea
   A. Sub-ideas (related ideas to main)
      1. less important detail
      2. less important detail

II. Study Skills
   A. Listening
      1. Prepare to listen
      2. Positive attitude
      3. Control thoughts
      4. Ignore distractions
   B. Notetaking
      1. Loose-leaf notebook
         (a) Interchangeable pages
         (b) Use dividers

Outlining shortens and simplifies info. It makes studying easier and results in higher grades.

Tips for taking down assignment accurately

1. Use an assignment page in a notebook
2. Use a calendar on which due dates are put in red ink
3. Use an assignment book
4. Keep handy at all classes

Homework

Key: Organization and Management

1. Set a regular time for homework
2. Pick a suitable place
3. Tackle least favorite or hardest subject first; makes homework easier. It's more difficult to do a least favorite subject or a hard subject when tired.
4. Make homework a priority. Allow at least 20-30 minutes for each major subject.
5. Have as many freedoms from distractions as possible. (no TV; quiet music or no music at all)
6. Give yourself rewards. Take breaks often and regularly.
7. Set a workable schedule: 45 mins. study; then break; study again for 45 mins.; break;
etc.

Textbooks

SO3R Method
1. Survey - look over; skim titles, chapter headings, and any questions at end of the chapters
2. Read - for main ideas; notice any heavy print or italics
3. Recite - summarize main ideas out loud or silently; repeat often
4. Review - summarize any main points and answer any questions at the end of the chapter
HOW TO USE A TEXT BOOK
HOW TO USE A TEXTBOOK

Introduction

Most students have little or no idea how to use a textbook to their advantage for studying, and that includes our adult students. Study time can be so much more valuable and productive if the students are aware of the specific parts of their textbooks, and how they can use those parts to enhance studying and learning. All of the information included in this section is excellent, but there are three particularly outstanding references: "Book Parts - Tools to Learning," "Getting the Most from your Textbook," and Guidelines for Studying Visuals." We have found that all our students benefit greatly from "Guidelines for Studying Visuals." Since a substantial portion of the GED test involves interpretation of graphs, these exercises are a tremendous help to those students who find dealing with visuals rather difficult. The exercises are quite basic, but they give the students a chance for success with an abstract form of reading that is often confusing and frustrating.

"Book Parts - Tools to Learning" and "Getting the Most from Your Textbook" are similar in content but different in approach. Some students relate better to the format presented in "Getting the Most from Your Textbook."

The textbooks that we provide for study are vital to the entire study/learning process. By teaching a viable way for the students to use those books, we are providing a means to greater success.

Through sharing the textbook information with their children, your students are providing for them vital, often missing information for greater achievement and success in school. When children receive a textbook, they don't know what to do with it let alone how to use it properly. The book, then, becomes something that is carried back and forth to school or left in a locker but certainly seldom read or used. The section on "Getting the Most from your Textbook" would be excellent material for your students to share with their children. If we teach our children how to use their textbooks, we are providing them with that means for greater success in school.
BOOK PARTS - TOOLS TO LEARNING *

The parts of your text have been purposely designed as tools to help you learn. They are instruments that will guide you to the information and knowledge you seek. Because each of the different book parts has a specific purpose, you should learn to use each part effectively and efficiently.

1. The title page will give you the following information:
   a. The title of the text
   b. The names of the author(s) or editor(s). Sometimes the qualifications of the author(s) or editor(s) are given.
   c. The copyright date. The date might be a clue to the recency and validity of the text.
   d. The publisher of the text.

2. Table of Contents
   a. Gives an outline of major topics in the text.
   b. Gives an overview of the text.
   c. Helps you locate useful information, such as reference tables, maps, illustrations, answers to exercises, the glossary, and the index.

3. Glossary
   a. Arranged in alphabetical order.
   b. Gives meanings of important words used in the text.

4. Index
   a. Arranged in alphabetical order.
   b. By looking up key words, you can use the index as a short-cut to information.

Reading Defined

Reading is:

1. Understanding the general and special vocabulary in a text.
2. Finding the main idea and supporting details in a reading selection.
4. Thinking about what you are reading - evaluating.
5. Being able to locate and organize information.
6. Concentrating on material you are reading.
7. Remembering the ideas and concepts encountered.
8. Interpreting graphic aids.
9. Using an appropriate reading rate for the type and difficulty of the reading selection.
   a. Fastest rates
      (1) Scanning - used to locate a specific detail, such as a telephone number.
      (2) Skimming - used to find the main idea or to survey a selection.
   b. A moderate rate is appropriate for study reading, which focuses on finding main topics and supporting details.
   c. The slowest rate is used when the material being read requires the reader's total concentration. Word problems in mathematics and technical manuals are types of reading selections that often require the reader to use a slow reading rate.
SQ3R 1

S  SURVEY  Quickly glance over the reading assignment to answer the following questions:

1.  What is the title?
2.  What information is found in the opening paragraph(s)?
3.  Do the boldface headings seem to present a simple outline of the reading assignment?
4.  What words are italicized to show emphasis?
5.  What information do the illustrations, charts, and graphs provide?

Q  QUESTION  1.  Turn the boldface headings into questions that provide a purpose for reading.


R  READ-AND-REFLECT  1.  Read the selection to find the answers to your questions.

2.  Underline the answers to your questions, but be selective when underlining. Underline only the most important words.

3.  Be sure to use the appropriate reading rate for the type of material you are reading.

R  RECITE  1.  Check your retention of the information.

2.  Use a blank card to cover the text under the first boldface heading. Again turn the boldface heading into a question. Then see if you can recite the answer aloud. Use the same procedure with the rest of the headings.

3.  Reciting information aloud is a valuable survival technique. Using it often will help you increase your retention of the material studies.

4.  Use your visual, auditory, and kinesthetic senses to increase the retention of material. George J. Dudycha urges students to "See it! Say it! Hear it! Draw it or write it!" 2
R    REVIEW

1. Skim the boldface headings again.

2. Try to answer the questions you have formulated.

3. If you forget some information, read the underlined parts of your text again. Then cover the text and once more try reciting the answers to your questions.

4. Study the information until recall is automatic.

5. REVIEW OFTEN TO INCREASE YOUR RECALL OF INFORMATION.


Skimming for Main Ideas

1. Read only the main idea (topic sentence) of each paragraph.
2. Read the title, subheadings, and words in boldface print or italics.
3. Watch for words that show relationships - however, moreover, in the first place, etc.
4. Use the six key question words to help you see the author's purpose:
   a. Who?
   b. What?
   c. Where?
   d. Why?
   e. When?
   f. How?
5. Don't let details slow you down.

STUDY READING

1. Concentrate!
2. Know why you are reading. What is the purpose?
3. Keep a brisk pace or your mind will wander.
4. Take notes:
   a. On divided paper.
   b. In outline form.
   c. Summarize.
      (1) First take notes on the main ideas and important details.
      (2) Be sure to answer the six key questions - who? what? where? why? when? and how?
      (3) Then write a summary from your notes
5. Keep in mind what you have learned about vocabulary study, finding the main ideas, and other reading skills.
6. Underlining forces concentration.

7. List possible test questions.
   a. Which information might appear in identification questions?
   b. What essay questions might be asked?

8. REVIEW OFTEN!

   VOCABULARY DEVELOPMENT

   1. Make a study sheet of the specialized vocabulary for each subject.
   2. Make a flash card for each new word in your reading assignments.
   3. USE YOUR DICTIONARY!
   4. Practice identifying words through their use in context.

   SPELLING IMPROVEMENT

   1. Keep a spelling list of the words you often misspell.
   2. Practice writing the words you need to learn.
   3. Develop a list of spelling hints to help you. Examples are:
      a. There is always a rat in separate.
      b. A friendly chief says hi to you.
   4. Put a spelling dictionary in your notebook. USE IT OFTEN!
   5. If spelling is difficult for you, be sure to ask someone to proof the papers you write.
Alan Thomas and Jon Peterson are partners in biology class. Together they work on lab experiments, sharing the same microscope.

Alan and Jon both spend about the same amount of time studying biology each night. But Alan remembers more of what he reads. And it shows in his grades.

One day, after a particularly difficult lecture, Jon stopped Alan in the hall.

"How can you remember all those things Ms. Kimberly talks about?" Jon asked. "You remember everything. How do you do it?"

"I'll show you a couple of things that help me," Alan said.

Alan opened his biology textbook. "It took me a long time to realize," he started, "that textbooks are not like other books. Textbooks have headings, subheadings, charts, and chapter summaries. These things can help you. So I pay special attention to them.

"I always read the chapter summary and questions before I read the chapter," Alan said. "I know that may sound stupid, but it helps me remember what I read.

"And if there are drawings or charts, I study them," he continued. "They're usually there for a reason. And they help me remember the details better."

The tips Alan gave Jon are good ones. And Alan is right. Textbooks are not like most other books. They do have headings, subheadings, charts, and chapter summaries, but they also have word lists, chapter questions, an index, an appendix, and a glossary. If you overlook these important study aids, you're not using your textbook to its full potential.

Getting to Know Your Textbook

The title of a book isn't really a study aid, but it's a logical place to begin to get to know your textbook. For your textbook, once you come to know it, can be a very good friend.

There are practical reasons, too, for looking closely at the title of a book. The title suggests the book's general contents. But a title may provide other clues as well: the reading level, purpose, and organization of the book, for example.

Suppose, for instance, the book title for your English class is *The English Language: Senior Course*. By reading the title, you know the subject is English and that the book is for advanced students.

**EXERCISE 1**

Read the following textbook titles. Based on the title, describe the general contents of each book. Write your description on the lines provided.

1. *The Blue Book of Language and Usage: A Manual for Writers and Speakers*

2. *How to Study in College*

3. *Ten Modern Short Stories*
A subtitle, if the author chooses to use one, further defines the scope of a book. A subtitle may narrow the topic or identify the audience for whom the book was written. In the exercise you just completed, for example, the subtitle of the first book was *A Manual for Writers and Speakers*.

If a subtitle is used, it will appear right after the title. Sometimes the title and subtitle are separated by a colon, as they are in the example above. Other times the subtitle is written in either smaller or lighter print, or in italic.

**EXERCISE 2**

Read the title and subtitles of the following books. Each subtitle either narrows the topic or defines the audience for whom the book is written. Circle the letter of a chapter heading you would most likely find in the textbook listed.

1. **Typing: An Introduction**
   a. Learning the Typewriter Keyboard
   b. So You Want to be a Doctor
   c. Writing Made Easy

2. **Beginning Math: Adding, Subtracting, Multiplying and Dividing**
   a. Chemical Elements in Nature
   b. Vocabulary on the College Entrance Exam
   c. Using Subtraction to Balance Your Checkbook

   a. The First Settlers in Nebraska
   b. The Growth of the Southern Plantation
   c. Wisconsin Politics in the 1960’s

4. **Classical Music: For the Beethoven Fan**
   a. Famous Hollywood Movie Stars
   b. Beethoven: A Legend
   c. Primitive War Songs

5. **American Indian Wars: An Overview**
Let's take a look at another important aid up front - the table of contents.

Chances are, you rarely use the table of contents, except maybe to locate a chapter without having to thumb through the entire textbook.

The table of contents is an easy reference. Chapter titles (sometimes chapter subtitles, too) are all listed, each with their appropriate page numbers.

When you're searching for a topic, the table of contents can save you time. Instead of flipping through numerous pages, you can turn immediately to the chapter you seek.

But a table of contents can help you in another way, too. Because it's an outline of the topics covered in the book, a close look will quickly reveal how your textbook is organized.

A table of contents is somewhat like a building blueprint. If you were to examine the blueprints for a large building, you would see each room in relation to all others.

A table of contents reveals at a glance the structure of a textbook. Like a building blueprint, it shows the relationship of one chapter to another. So looking through the table of contents is another way of becoming familiar with your textbook.

EXERCISE 5

Check the table of contents of a textbook you're currently using. Then answer the following questions. Write your responses on the lines provided.

1. How many chapters are in your textbook?

2. On what page does Chapter 1 begin?

3. What is the title of Chapter 2?

4. Is your textbook divided into parts or sections? If so, list them.
5. Are there subheadings in the table of contents? Are these subheads helpful?

Remember when Alan said he reviews each chapter by first reading the chapter title, then each heading and subheading?

Alan doesn’t know it, but he’s practicing a study technique highly recommended by several reading-study methods (which we’ll discuss later).

What are headings and subheadings? They’re the little descriptive titles at the beginning of each small section of text. They’re found throughout a textbook chapter, and they summarize very briefly what each small section is all about.

If Alan were to make a list of each major heading and subheading, he’d have a concise, informative outline of the main points in each chapter. I think you can see how this information would be helpful.

While some authors are better than others at providing informative titles, creative authors often write headings that are both informative and clever. Clever headings spark the reader’s interest, which makes them easier to remember.

As an aid to the student, many textbooks, especially technical books, have word lists or special vocabulary sections. When an author goes out of the way to help with vocabulary, pay special attention. You’ll probably need to know these words if you’re to understand the ideas presented in the material.

Alan explained earlier why maps, charts, graphs, and pictures are such important study aids. Because they are visual, they quickly explain an idea that might normally require several paragraphs of text. Besides, when you see a concept explained, you’re more likely to remember it. When you see maps, graphs, charts, and pictures in your textbooks, you might try the following.

When Reading Maps

1. Read the title if there is one. The title should tell you why the map is there.

2. Study the legend or key to find the meaning of each symbol. Each symbol is a visual image of an important point - a point you should remember.

When Reading Graphs and Charts

1. Again, read the title to understand why the graph or chart is used.

2. Read the column headings (if a chart) or the axis labels (if a graph).

3. Graphs and charts are usually used to show trends or relationships. Try to figure out the trend or relationship the author is trying to show.
When Viewing Pictures

1. Read the picture caption to see what the author considers important about the photograph.

2. Try to figure out how the picture reinforces the text.

EXERCISE 6

Study the graph on this page. Then answer the questions. Write your responses on the lines provided.

A Comparison of School Attendance and Days of the Week

<table>
<thead>
<tr>
<th>Number of Students Attending School</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
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<td>900</td>
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<td>100</td>
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</tbody>
</table>

1. What is the title of the graph?

2. What two things are being compared?

3. On which day is attendance poorest?

4. On which day is attendance best?

5. What does this graph reveal about attendance and days of the week?
Exercise 7

Now study the chart below. Then answer the questions. Write your responses on the lines provided.

The Average Number of Candy Bars Eaten in One Year By Selected Age Groups

<table>
<thead>
<tr>
<th>AGE</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>55</th>
<th>60</th>
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<td>15</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>2</td>
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</tbody>
</table>

Number of Candy Bars Eaten

1. What is the title of the chart?

2. What two things are being compared?

3. Which two age groups ate the most candy bars in one year?

4. Which three age groups ate the fewest candy bars?

5. What does the chart reveal about age and candy consumption?
Kathy Warren wonders why some kids always seem to get good grades without really trying. Her friend, Julie, for example, is busy with a part-time job, yet she still gets good grades. And Julie doesn’t study any more hours a week than Kathy does.

What Kathy doesn’t realize is that when Julie sits down to study, she knows how to study right. For instance, Julie reviews the chapter summary before she reads her assignment.

That way, she knows in advance what the chapter is going to be about. And as she reads, she recognizes key points and is more likely to remember them.

Another thing Julie does is read through the questions at the end of each chapter before she starts her reading assignment. Like the chapter summary, the questions reveal what the author considers important.

The questions focus Julie’s thinking as she reads the material. By the time she’s completed the assignment, Julie has the answers to each question. And she has a better understanding of key concepts and their relationships to one another.

Check your textbooks for chapter summaries or chapter questions. Then next time, review these two sections before you read your assignment. See if it makes a difference.

Not too many students use appendix materials, unless of course the teacher makes the appendix a reading requirement. It’s unfortunate that the appendix is not often used. For the appendix can provide interesting information.

An appendix is supplementary material. That means it contains information considered extra or in addition to the material provided in the text.

An appendix, which often includes charts, graphs, addresses and lists is usually in the back of the book. In a cookbook, for example, the appendix might be a list of metric measurements.

While an appendix is not usually required reading, it can be an important study aid. Skimming through the appendix, especially if the author recommends it, might provide help with a difficult concept or spark an interest in a related field.

EXERCISE 8

Read the five textbook titles. Then for each title, circle the letter of the item most likely found in an appropriate appendix.

1. Woodworking: A Practical Guide
   a. a glossary of woodworking terms
   b. a listing of our national forests
   c. instructions on installing a sink

2. The American Family
   a. EPA charts for American-made cars
   b. a list of family-related publications
   c. addresses of health organizations in foreign countries
3. The Complete Book on Dogs and Cats
   a. a sample immunization record for your cat
   b. information on how to raise snakes
   c. sketches of famous North American birds

4. How to Save a Life
   a. requirements for completing a nursing degree
   b. pictures of common first-aid techniques
   c. blueprints of a modern building

5. History of the American People
   a. a map of Brazil
   b. pictures of South African wildlife
   c. a list of U.S. presidents

A glossary is an alphabetical listing of technical words found in the textbook. In some ways a glossary is like a dictionary. In both a dictionary and a glossary, for example, words are defined.

There is one big difference between the two, however. As you know from dictionary study, many definitions appear for most words in an ordinary dictionary. In a glossary, however, you'll find only the definition for each term that's appropriate for the context.

You can save time by looking up unfamiliar words in the glossary, rather than in the dictionary. For in the glossary, you'll find immediately the definition you need.

Here's another suggestion: Before a test, you might use the glossary to review important vocabulary and concepts.

Last night Kathy Warren spent twenty minutes flipping through pages of her English textbook. Finally she found the rule she needed on using the semicolon between items in a series.

Unlike her friend Julie, Kathy hasn't learned yet how to use the study aids provided in her textbooks—like the index, for example. If Kathy had turned to the index for help last night, she could have located the rule she needed in a matter of minutes.
Let look at a section of the index in the back of Kathy's English textbook.

---

Run-on sentence, 84-86
Salutations, in business letter, 42-43
Semicolon, 547-48: between main
clauses joined by for example,
nevertheless, therefore, 547;
between main clauses not joined
by and, but, 547; between series
items, 548.
Sentence fragments, 78-83: appositive
fragment, 81; defined, 78, 79; kinds
of, 78; phrase fragments, 80-81;
subordinate clause fragment, 81-82
Sentence sense, 77
Sequence of tense, 164-66
---

According to the index, pages 547 and 548 in the text are devoted to the semicolon. The specific information Kathy needs, using the semicolon between items in a series, is found on page 548.

With a little practice Kathy could easily learn how to use the index to locate information quickly, leaving the rest of the time for study.

LET'S REVIEW

Take a look again at the textbook aids discussed in this chapter. In the next exercise, you're going to examine several of your texts for these and other study aids.

EXERCISE 9

Select three of the textbooks you're currently using. You might choose an English text, a history text, and a science test, for example.

Look through each book, searching for the textbook aids listed in the chart below. Place a check mark in the appropriate space whenever a particular study aid is found in a book.

Are certain study aids more common in one text than in another? Why? Did you find other study aids not discussed in this chapter? Which study aids do you find most helpful?
<table>
<thead>
<tr>
<th>Textbook Aids</th>
<th>English</th>
<th>Science</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Table of Contents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter Titles, Headings and Subheadings</td>
<td></td>
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<tr>
<td>Word Lists</td>
<td></td>
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<tr>
<td>Visual Aids</td>
<td></td>
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<tr>
<td>Chapter Summary or Conclusion</td>
<td></td>
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<tr>
<td>Chapter Questions</td>
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<tr>
<td>Appendix</td>
<td></td>
<td></td>
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<tr>
<td>Glossary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**A FINAL SUGGESTION**

Whenever you read an assignment in a textbook, imagine a two-way conversation between yourself and the textbook author.

Ask the author questions. Learn as much as you can. After all, the author wrote the book to help you learn an important subject. If the author didn't think the task worthwhile, the book would never have been written.

Before you go on to the next chapter in this workbook, review the study aids discussed in this chapter once more. Concentrate on these study aids in the future, and the quality of your study time should improve.
Alice Jackson has an assignment: Read Chapter 10 in her American Problems textbook. Alice likes her American Problems class, so she enjoys doing the homework assignments.

This evening, Alice turns to the beginning of the assigned chapter and starts reading about railroads in the Old West. To Alice the material seems full of adventure and exciting people. She's learning a lot as she reads, or at least she thinks so.

When she's finished, Alice reads the chapter a second time just to be extra prepared for class. Now she feels ready to answer any questions Mr. Gomps might ask in the morning.

But instead of asking questions the next morning in class, Mr. Gomps surprises everyone with a written quiz. For some unexplained reason, Alice misses most of the questions. What could have happened?

Alice doesn't realize it, but she, like most people, remembers less of what she reads than she thinks. Most people remember only about half of what they read. And after two weeks they recall only one-tenth of the original material!

Surprisingly, reading a lesson several times one sitting does not increase the amount of information you'll remember. After several readings, most people still recall only 10 to 50 percent. And that's not enough to pass a quiz or exam.

Alice is making a common mistake. She's reading her textbook in much the same way she would read her favorite novel. But reading for study is not like reading for fun. Alice, like most students, could benefit from a reading-study system.

WHAT IS IT?

A reading-study system is a step-by-step method to help you remember more of what you read. Most reading-study systems follow the same basic steps. Let's look at the SQ3R system, one of the more popular reading-study methods taught in schools.

The SQ3R system is basically a five-step program: survey, question, read, recite, and review.

STEP 1: SURVEY THE READING

The word "survey" means "get a general view of." So when you survey a reading selection, you're previewing the material to get an idea of what it's all about.

In the SQ3R method, you do something else as you survey the material. You estimate the amount of time you think it will take to complete the assignment.

This is important. For later, you'll budget study time based on this estimate. When you make your estimate, remember that reading for study takes longer than reading for fun.

Remember, too, that different types of material take different amounts of time to read. Five pages of very technical material will take longer to read than five pages of simple narrative. If the material is full of ideas that are new to you, the reading will take longer, too.

When you have an idea of how long it will take to complete an assignment, you're not as likely to spend too much time on the material.

Here are some other things to do when you survey a reading selection.

* Read the title, all headings, and subheadings.

* Read the introduction if there is one.

* Read the first paragraph in each new section. This paragraph often summarizes the points the author considers important.

* Read the first sentence under each new heading.

* Look briefly at all visual aids (maps, charts, cartoons, diagrams, and pictures).

* Read the last paragraph of the chapter summary.

* Read the study questions.

EXERCISE 1

Turn to a chapter in a history textbook. Imagine that your assignment is to read the entire chapter. Survey the selection, then answer the following questions. Write your responses on the lines provided.

1. What is the chapter title?

________________________________________________________________________

________________________________________________________________________
2. List all headings and subheadings.
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

3. How many pages long is the chapter?
   ______________________________________________________________________

4. How long will it take to read the assignment?
   ______________________________________________________________________
   ______________________________________________________________________

5. What in general is this chapter about?
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

EXERCISE 2

Now turn to a chapter in a science text. Again, imagine your assignment is to read the chapter. Survey the selection first, then answer the following questions. Write your responses on the lines provided.

1. What is the chapter title?
   ______________________________________________________________________
   ______________________________________________________________________
2. List the first sentence under each major heading.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

3. What in general is this chapter about?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

4. How many visual aids (charts, maps, graphs, pictures) are included in this chapter?

____________________________________________________________________

5. How long will it take to complete the assignment?

____________________________________________________________________

EXERCISE 3

Turn to any chapter in a textbook of your choice. Imagine that your assignment is to read that chapter. Survey the selection, then on a separate sheet of paper complete the following activities. (You may want to select a shorter chapter for this practice activity.)

1. Write the chapter title.

2. Write each chapter heading.

3. Read the first paragraph, then write a short summary of the content.

4. Write the first sentence under each chapter heading.

5. Are maps, charts, cartoons, diagrams, and pictures included in this chapter? If so, write a short description of each one.
6. Read the last paragraph. Write a brief summary of what the paragraph is about.

7. Estimate the amount of time it will take to read this chapter.

EXERCISE 4

Underlining important points in a chapter with a felt marker or highlight pen makes reviewing the material later much easier.

Survey a chapter in one of your textbooks, underlining or highlighting the seven items identified below. Then, just before a test, review the highlighted material.

Important: Don't mark up a book that doesn't belong to you. If you don't buy textbooks in your school, try the exercise on your class notes instead.

1. Chapter title. This is what the chapter is all about.

2. Chapter headings and subheadings. These are the major topics.

3. Word lists. These are vocabulary words you must know to get the most from your reading.

4. First paragraph. This is usually an overview of what is covered.

5. Italicized terms. These words are important vocabulary.

6. First sentence of each paragraph. The topic sentence is usually found at the beginning a paragraph.

7. Study questions. These provide clues to what the author considers important.
QUESTION THE REASONS FOR READING

Questioning, the second step in the SQ3R method, involves using your sense of curiosity. Before you read your assignment, ask yourself several questions about the material. Then look for the answers as you do your reading.

If you have trouble coming up with a set of good questions, try converting chapter headings and subheadings into some thought-provoking queries.

Imagine that Alice Jackson's assignment is to read a chapter in a textbook entitled, *Today's Education*. From the headings and subheadings, Alice might come up with a set of questions like these.

**Chapter Heading**

School and the Family

**Possible Questions**

Is there a relationship between school and family? Is so, what is it?
Do significant events in school have an effect on the family? How?
Do changes in a family have an effect on the school? How?

**Chapter Heading**

The School Dropout

**Possible Questions**

Who are school dropouts?
How can students be encouraged to stay in school?

**Chapter Heading**

School and the Stages of Growth

**Possible Questions**

What are the stages of growth?
What do stages of growth have to do with school?
Converting the first sentence of each paragraph into a question will work, too. For in most cases, this sentence is the main idea with the rest of the sentences in the paragraph contributing important details.

Why ask questions before you read? The answer is simple. Questions provide a purpose or focus for your reading. And when you read with a purpose, you're more likely to remember what you learn.

EXERCISE 5

On the lines provided, write two questions you might ask for each chapter heading.

Chapter Heading

Study Methods

Your Questions
1. 
   
2. 

Chapter Heading

Student Absenteeism

Your Questions
1. 
   
2. 

Chapter Heading

Letter Writing

Your Questions
1. ____________________________
   ____________________________
2. ____________________________
   ____________________________

Chapter Heading

Drugs in Schools

Your Questions
1. ____________________________
   ____________________________
2. ____________________________
   ____________________________

Chapter Heading

The Characteristics of a Good Student

Your Questions
1. ____________________________
   ____________________________
2. ____________________________
   ____________________________

EXERCISE 6

Turn to a short chapter in any textbook you're currently using. In the space provided on the opposite page, write a study question for each heading using who, what, where, when, how, and why words.
STEP 3: READ THE MATERIAL

While this step may seem pretty obvious, there are a few things to suggest that you might not normally think of doing.

For example, as you read answer the chapter questions not just in your head, but on a separate sheet of paper. Then store the questions with your answers in your notebook next to the notes you take in class.

Write down any vocabulary that is new or unfamiliar. Guess the meaning of the terms from context, then look in a dictionary or glossary for an appropriate definition. Keep a list of these terms with their meanings to study again later.

Also, in your mind, talk to the textbook author. Ask questions. Does the author have any biases? Has the author excluded any important information? In short, read for information, but read critically, too. Reading for study is an active mental process.

EXERCISE 7

Turn to the same chapter you used in Exercise 6. Now read the chapter paying special attention to the vocabulary. Using the space provided below, write each word that is new to you. Try to guess the meaning of each word from context. Then find a definition for each word in a reliable dictionary or in the glossary.

________________________
________________________
________________________
________________________
________________________
________________________
________________________

STEP 4: RECITE THE INFORMATION TO YOURSELF

Remember Step 2? Ask questions before you read the material? Now it's time to answer these questions—aloud and in your own words.

Recite the answers to your own questions out loud, as though you were explaining what you learned to a classmate or a friend.

Reciting aloud, surprisingly, helps people remember what they read. Actually, there's a good reason for this phenomenon. The more senses you involve as you study, the more likely it is you'll remember what you learn.
EXERCISE 8

Complete the following activities using the same chapter you selected in Exercises 6 and 7.

1. Summarize in your own words what you just read.
2. Answer aloud the questions you prepared in Exercise 6.
3. Recite out loud any other significant information you remember.
4. Define aloud the vocabulary you identified in Exercise 7.

STEP 5: REVIEW PERIODICALLY

Periodic review increases the amount of information you recall. Look over your lecture or lab notes, and review your answers to the chapter questions again later in the week.

Several days after you read an assignment, go over the material again. Read the chapter summary and review the headings and subheadings once more. This one step before a test will improve your rate of recall significantly.

EXERCISE 9

Looking again at the chapter you used in Exercises 6, 7, and 8, complete the following activities.

1. One week after reading the chapter, answer the chapter questions once again, either aloud or on a separate sheet of paper.
2. Look at your vocabulary list in Exercise 7 once more. Define each word out loud in one or two sentences.
3. Look at the major headings and subheadings. Summarize what each section is about. Recite your summaries aloud.

VERSATILITY IS THE KEY

A good reading-study system like SQ3R can help you in other areas as well as in school. Let's look at how Coach Rodrick uses a reading-study technique with his football players.

First, he surveys his team during practice. He also surveys the opposition. Then he questions the plays he sees. Where are the weak points? What are the strong points? How can his team improve the old plays? Should he develop some new plays?

Next the coach reads about several different plays. He summarizes what he's learned and recites his findings to the team.
Finally, Coach Rodrick helps his team review old and new plays, as well as the opposing team's strengths and weaknesses.

So you see, SQ3R is really a system of organization and review. Whether you use SQ3R or devise a study system of your own, the basic steps can help you in both school related and personal situations.

PRACTICE MAKES PERFECT

There are many reading-study systems. But most follow the same basic steps. You may wish to come up with a system of your own, or change the SQ3R method to fit your personal learning style.

Take some time to explore what works best for you. But once you've discovered a technique that works, use it often.
LEARNING TIPS *

LEARNING TIP 3

LEARN THE SPECIAL VOCABULARY

Every course has its special vocabulary. You'll study faster if you isolate those words and learn what they mean. Sometimes a word you know well suddenly takes on a specific meaning, and for that course all other meanings are wrong. Watch for these words especially; they're tricky. (For example, specific means one thing in our sentence above, but in specific gravity it means something else.)

Keep 3 x 5 cards close at hand when you listen, read, and review. Each time the book or your professor defines a term, write the term on one side of the card and its definition on the other. This has two advantages: (1) writing makes more of a dent in your memory than just reciting; (2) you've started a permanent cram file for tests.

Sometimes you'll find a new term that isn't defined by the teacher or the book. It's probably one that was defined in a previous course most of the class had. Before you settle for the dictionary definition, ask a professor. It may turn out to be (1) something he'd better teach the entire class, in which case he'll be grateful, or (2) a clue to a big gap in your preparatory learning--maybe something you missed in twelfth grade because you were home with the flu.

There's more to vocabulary than words. Math, science, even social science courses rely on basic symbols. Make sure that they, too, go on your vocabulary cards if they're new to you. Formulas are basic vocabulary in some courses.

Do you know how to read graphs, tables, charts, diagrams, drawings, and photos? If you've never learned, see if your school study center gives a short course you can enroll in. It's tempting to skip over these illustrations, but that's like skipping the book introduction. Like the introduction, illustrations are put there to help you, not the author. If you stop and figure out what they mean, you're guaranteed to remember what they tell you.

What do you do if a book seems like it's all written in some special vocabulary? (Many times, we've felt as if we were over our heads in long sentences that made little sense.) Usually, it's not your fault but the fault of bad writing. Some authors, especially in education and social sciences, spew out a large amount of jargon. Sometimes you can make sense of it if you read it aloud. Sometimes it's worthwhile to search for a more clearly written book on the same topic, and to read the appropriate part of that one first. Your instructor may be able to point you in the right direction. If not, ask for help.

Especially if you're not interested in the subject, try to find an easier book that explains it. You'll do much better on exams if you understand a simplified idea completely than if you only partially understand a complicated one.

LEARNING TIP 4

SKIM BOOK PREFACES, INTROS, AND SUCH

You probably got used to skipping intros after trying a few in grade school. There, the textbooks intros were written for teachers, not students. And the intros to novels were often dull facts about the author's life or philosophy. Skipping the intro didn't hurt your enjoyment of the story one bit. But for textbooks, the intros are meant to help you. They may explain the author's point of view, show the organization, define special terms and symbols, and offer hints for best use of the book. In short, they may cut down on your reading and study time.

Introductions are often boring, so don't read every word. But do skim to see what's in them.

LEARNING TIP 5

CUT YOUR READING TIME IN HALF

At the hub of most courses is the textbook or the set of required readings. Few teachers cover everything that's in the books in class, but most expect you to remember all their contents on tests. Interest helps your mind remember, but it's hard to work up enthusiasm when you've got twenty pounds of difficult pages to get through in four months.

Simply reading a chapter from start to finish doesn't work on most textbooks, mostly because part of your mind is wishing you were finished. One researcher found that the average person forgets half the ideas he reads within a few minutes. To make any impression that your mind can remember, you need to give the ideas or facts complete attention. If you find yourself backtracking words, phrases, or even paragraphs, you're nonreading, not reading. It's a waste of your time.

Several systems have been devised that keep your reading in sharp focus, with hard-to-forget acronyms like SQ3R, OK4R, PANORAMA, REAP, PQRST, and even OARWET. They've been proven to work, too, if you stick with any one of them. Here's our own modification of Dr. Walter Pauk's OK4R system:

1. Overview: Read the title, the introductory and summarizing paragraphs, and all the headings. Read everything in italics and bold type, and all bulleted (o) sections, itemizations, pictures, and tables: in other words, everything that stands out from the ordinary text. You'll end up with a very good idea of the topics in your homework selection.

2. Key ideas: Now skim the text for the key ideas. (We'd like to call this part S because skimming is what's important. But OK4R, being catchier, is easier to remember than OS4R.)

3. Read your assignment from beginning to end. Do it quickly. You'll be able to, because you already know where the author is going and what he's trying to prove. (If you slow up, you're going to start thinking about other things and you'll start forgetting more than you remember.)
R2. **Rite:** Put aside the text and write, in a few key words or sentences, the major points of what you've read. Since most forgetting takes place right after initial learning, and writing is twice as effective a memory jog as just thinking, one minute spent right away writing down what you read actually doubles the amount that you'll fix in your brain. (Don't try to shortcut by copying the author's summary. It's wasted effort. You won't learn a thing unless you filter the information through your brain.)

R3. **Relate:** To really keep the material in your mind forever, connect it in with what you already know. The best way is to find some personal significance or strong image for what you've read. You'll find other ways scattered through the Remembering Tips.

R4. **Review:** This step doesn't take place right away. It should be done for the next short quiz, and then again for later tests throughout the term. Several reviews will make that knowledge indelibly yours.

If you get a pen and some paper, we'll prove to you that the system works. Read the title of this section: *Cut Your Reading Time in Half*. Now read OK4R: Overview, Key ideas, Read, Rite, Relate, Review. We've helped you do the OK part; now reread the whole section quickly to here. Once that's done, rite what we said—just a few key words. We wrote down: to remember textbook material: (1) interest, (2) systems: OK4R preferred. Overview (general idea), Key ideas (skim), R1 Read (fast), R2 Rite (1 minute), R3 Relate (connect in mind), R4 Review (later).

Let's do the R3 together, the part about making connections in your mind. In our minds, this system is similar to the way you'd open a birthday gift. First you try to guess the contents from the box's size and shape (overview). They you jiggle it for a key to what's inside (key words). You open it and read the label. It's an electric finger-warmer. You write a thank-you note saying how handy it'll be at the next football game (relate). Then you put it away—and forget you own it unless you remember it from time to time (review).

We chose to relate OK4R to a birthday gift image. You could have selected the image of doing a picture puzzle, visiting a strange resort, or anything else that seems similar to the procedure to you. Relating is fun once you get the hang of it—and it's the best memorizing device known.

If you rebel against systems and aren't willing to try OK4R, here's a four-step procedure to try. This one also works for novels and for nontextbook nonfiction like articles, essays, and source materials.

1. **Skim.** Read titles and skim pages, reading whatever catches your eye. If you find any summaries, read them, but only after you've skimmed all the pages.

2. **Read.** Read the whole selection quickly, penciling check marks next to important parts and parts that you can't understand.

3. **Probe.** Go back and reread the parts you've checked until you understand them thoroughly. Now that you've read the whole section, some of those parts will make sense without further effort.

4. **Write.** Sum up the main idea, significant details, and conclusions, in your own words, either in outline form or in sentences or in patterns, whichever form makes the most sense.
Or try your own system. Anything is more effective than just trudging through from start to finish—and faster, too, we guarantee.

Some reading systems suggest that you figure out questions to ask yourself while you read. But if you haven’t got any background on a topic, finding questions takes more time than it’s worth. Some systems advise you to read the first sentence of every paragraph before you read through the entire selection. But few authors consciously remember to put a paragraph’s topic in the first sentence. Sometimes it’s there; often it isn’t. Skimming the entire passage quickly is generally just as effective.

The point of skimming should be to work up some interest in reading what the author has to say. If an interesting sentence here and there catches your eye, you’ve accomplished the purpose.

LEARNING TIP 8

HOW MOST IDEAS ARE ORGANIZED LOGICALLY 1

GROUP 1. In time sequence:
- in the sequence in which it was seen or done
- in the sequence in which is should be seen or done
- from cause to effect

GROUP 2. From general to specific:
- general topic to subtopics
- theoretical to practical
- generalization to examples

GROUP 3. From least to most:
- easiest to hardest
- smallest to largest
- worst to best
- weakest to strongest
- least important to most important
- least complicated to most complicated
- least effective to most effective
- least controversial to most controversial

GROUP 4. From most to least:
- most known to least known
- most factual to least factual (fact to opinion)

1 Reprinted from Good Writing by Judi Kesselman-Turkel and Franklynn Peterson (Franklin Watts, 1981).
GROUP 5. Giving both sides (grouped or interspersed):
- pros and cons
- similarities and differences (compare and contrast)
- assets and liabilities
- hard and easy
- bad and good
- effective and ineffective
- weak and strong
- complicated and uncomplicated
- controversial and uncontroversial
GUIDELINES FOR STUDYING VISUALS *

1. Survey the visual. This will give you a general idea of what it is displaying.
2. Read the title. This will tell you what specific type of data the visual is displaying.
3. Determine the numerical data the visual is displaying. Is it percentages, fractions, whole numbers, years or some other unit?
4. Determine the different kinds of data. Notice what data is in the columns, in the rows, on the vertical axis, on the horizontal axis, and so on.
5. Determine the key to symbols. This will help you to interpret the data correctly.

BAR GRAPHS

Bar graphs represent information with vertical or horizontal bars. The information represented by the bars is usually related to years or quantities, like changes in population, attendance at sporting events, numbers of high school graduates attending college, and so forth.

* Richard P. Santeusanio, Study Skills and Strategies (Maryland: College Skills Center, 1988), pp. 146 - 156.
Exercise A. Vertical Bar Graphs

Study these two vertical bar graphs. Then answer the questions that follow.

1. What is this graph displaying?
2. What is being compared in this graph?
3. Will the population of the South increase more between 1980-1990 or between 1990-2000?
4. In what parts of the country will there be a decrease in population between 1990-2000?
5. What is the total expected increase in the population of the West from 1980 to 2000?

Regional population projections for the final two decades of this century.
Exercise B. Horizontal Bar Graph

Study this horizontal bar graph. Then answer the questions.

1. What is the graph displaying?

2. What is being compared in this graph?

3. What age group had the greatest population in 1970? 
   In 1980?

4. What age groups showed an increase in population between 1970 and 1980?

5. What age groups showed a decrease in population between 1970 and 1980?

---

Percentage of Total Population by Age Group, 1970 and 1980

- 25 to 34 years: 1970 - 12.3, 1980 - 16.4
- 35 to 64 years: 1970 - 32.0, 1980 - 31.0

Source: U.S. Department of Commerce, Bureau of Census
CIRCLE, OR PIE, GRAPHS

Circle, or pie, graphs show proportional parts of the whole. For example, you could draw a circle to represent a day. Then you could cut out "pie slices" to show the portion or percentage of your day that is devoted to eating, sleeping, studying, and so on.

Circle graphs are relatively easy to read. Unlike bar graphs, where you sometimes have to interpolate or estimate data, the exact amounts are given directly.

Exercise C. Circle, or Pie, Graph

Below is a circle graph. Study it and then answer the questions that follow it.

1. What is the graph displaying?

2. What group is the largest beneficiary group?

3. What is the smallest beneficiary group?

4. Why do you think a category labeled "Other" appears on the graph?

5. What percentage of benefits goes to survivors of deceased workers?
Exercise D. Circle, or Pie, Graph

Study the graph below. Then answer the questions that follow.

**SOURCES OF FUNDS**

- **STATE & FEDERAL GRANTS**: 2.3%
- **REVOLVING FUNDS**: 3.9%
- **STATE AID TO SCHOOLS**: 15.2%
- **REVENUE SHARING**: 0.3%
- **WARRANT ARTICLE**: 2.5%
- **LOCAL TAXES**: 75.9%

Centerville’s Public School Budget

1. What is this graph displaying?

2. What is the largest source of funds?

3. What is the smallest source of funds?

4. What percentage of funds comes from state aid to schools?

5. What percentage of funds comes from grants?
LINE GRAPHS

Line graphs are used to show how data changes over a period of time. You must be sure to determine what variables are being depicted on the graph. One variable will be on the vertical axis and the other will be on the horizontal axis.

Exercise E. Line Graph

Study the line graph below. Then answer the questions.

1. What is the graph displaying?

2. What is shown on the vertical axis?

3. What is shown on the horizontal axis?

4. In what years did women receive more bachelor's degrees than men?

5. How many total bachelor's degrees were awarded in 1981?
Exercise F. Line Graph

Study the line graph below. Then answer the questions that follow it.

The elementary school age population will increase

Population 5 to 13 years of age (millions)


1. What is the graph displaying?

2. What is shown on the vertical axis?

3. What is shown on the horizontal axis?

4. What was the elementary school age population in 1975?

5. What is the projected elementary school population for 1995?

TABLES/CHARTS

Tables and charts are used to summarize large amounts of data in an orderly form. They are often used as a handy reference for specific types of information, such as information related to natural elements as shown in Exercise G. You must pay particular attention to headings in tables and charts in order to interpret the data correctly.
Exercise G. Table

A table appears below. Study it and then answer the questions that follow.

THE NATURAL ELEMENTS
In Alphabetical Order

<table>
<thead>
<tr>
<th>Element Name</th>
<th>Element Symbol</th>
<th>Atomic Number</th>
<th>Atomic Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>actinium</td>
<td>Ac</td>
<td>89</td>
<td>227</td>
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<tr>
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<td>Al</td>
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<td>Sb</td>
<td>51</td>
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<td>Ar</td>
<td>18</td>
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</tr>
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<td>As</td>
<td>33</td>
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<tr>
<td>atomic weight of mercury</td>
<td></td>
<td></td>
<td></td>
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<td>Cd</td>
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<td>I</td>
<td>53</td>
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<td>Ir</td>
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<td>iron</td>
<td>Fe</td>
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<td>47</td>
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<td>16</td>
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</tr>
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<td>thorium</td>
<td>Th</td>
<td>232.0381</td>
<td></td>
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<tr>
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<td>168.9342</td>
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<td>118.71</td>
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<tr>
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<td>Tl</td>
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<td>204.37</td>
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<td>U</td>
<td>92</td>
<td>238.029</td>
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<td>Xe</td>
<td>54</td>
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<td>39</td>
<td>88.9059</td>
</tr>
<tr>
<td>zinc</td>
<td>Zn</td>
<td>30</td>
<td>65.37</td>
</tr>
</tbody>
</table>

1. What is this table displaying?

2. What does the symbol "Sn" mean?

3. What is the atomic weight of mercury?

4. What is the symbol for silver?

5. What is the atomic number for krypton?
Exercise H. Table

A table appears below. Study it and then answer the questions that follow.

<table>
<thead>
<tr>
<th>Year</th>
<th>Ellis Island</th>
<th>All entry ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1903</td>
<td>631,835</td>
<td>857,046</td>
</tr>
<tr>
<td>1904</td>
<td>606,019</td>
<td>812,870</td>
</tr>
<tr>
<td>1905</td>
<td>788,219</td>
<td>1,026,499</td>
</tr>
<tr>
<td>1906</td>
<td>880,036</td>
<td>1,100,735</td>
</tr>
<tr>
<td>1907</td>
<td>1,004,756</td>
<td>1,285,349</td>
</tr>
<tr>
<td>1908</td>
<td>585,970</td>
<td>782,870</td>
</tr>
<tr>
<td>1909</td>
<td>580,617</td>
<td>751,786</td>
</tr>
<tr>
<td>1910</td>
<td>786,094</td>
<td>1,041,570</td>
</tr>
<tr>
<td>1911</td>
<td>637,003</td>
<td>878,587</td>
</tr>
<tr>
<td>1912</td>
<td>605,151</td>
<td>838,172</td>
</tr>
<tr>
<td>1913</td>
<td>892,653</td>
<td>1,197,892</td>
</tr>
<tr>
<td>1914</td>
<td>878,052</td>
<td>1,218,480</td>
</tr>
<tr>
<td>1915</td>
<td>178,416</td>
<td>326,700</td>
</tr>
<tr>
<td>1916</td>
<td>141,356</td>
<td>298,826</td>
</tr>
<tr>
<td>1917</td>
<td>129,446</td>
<td>295,403</td>
</tr>
<tr>
<td>1918</td>
<td>28,857</td>
<td>110,618</td>
</tr>
<tr>
<td>1919</td>
<td>26,731</td>
<td>141,132</td>
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<tr>
<td>1920</td>
<td>225,206</td>
<td>430,001</td>
</tr>
<tr>
<td>1921</td>
<td>560,971</td>
<td>805,228</td>
</tr>
<tr>
<td>1922</td>
<td>209,778</td>
<td>309,556</td>
</tr>
<tr>
<td>1923</td>
<td>295,473</td>
<td>522,919</td>
</tr>
<tr>
<td>1924</td>
<td>315,587</td>
<td>706,896</td>
</tr>
<tr>
<td>Total</td>
<td>10,988,270</td>
<td>15,739,135</td>
</tr>
</tbody>
</table>


1. What is this table displaying?

2. In what year did the largest number of immigrants enter through Ellis Island?

3. In what year did the second largest number of people enter through all entry ports?

4. How many immigrants entered Ellis Island in 1915?

5. Why do you think this table lists Ellis Island as a separate port of entry?
Exercise I. Chart

A chart appears below. Study it and then answer the questions.

Allocations of weekly working hours by faculty members at 4-year institutions

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course preparation</td>
<td>7.5</td>
</tr>
<tr>
<td>Undergraduate instruction</td>
<td>6.9</td>
</tr>
<tr>
<td>Research</td>
<td>6.7</td>
</tr>
<tr>
<td>Office hours</td>
<td>5.3</td>
</tr>
<tr>
<td>Administration</td>
<td>4.4</td>
</tr>
<tr>
<td>Advising and counseling</td>
<td>3</td>
</tr>
<tr>
<td>Graduate instruction</td>
<td>1.3</td>
</tr>
<tr>
<td>Consulting</td>
<td>1.3</td>
</tr>
</tbody>
</table>

**SOURCE:** 1984 Carnegie Foundation Survey of College Faculty, as reported in Change, Sept./Oct. 1983

1. What is this chart displaying?

2. How many major responsibilities do college professors have?

3. On what activity do college professors spend the least amount of their professional time?

4. On what activity do college professors spend most of their professional time?

5. How many hours per week does the typical professor advise and counsel his or her students?
Exercise J. Chart

Study the chart below. Then answer the questions.

<table>
<thead>
<tr>
<th>HEALTH DIAGNOSING AND TREATING PRACTITIONERS</th>
<th>Estimated employment 1984</th>
<th>Percent change in employment 1985-95</th>
<th>Numerical change in employment 1984-95</th>
<th>Employment prospects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiropractors</td>
<td>31,000</td>
<td>29</td>
<td>9,100</td>
<td>Employment expected to grow faster than average as chiropractors enjoy broader public recognition. A greatly increased supply of new graduates will lead to substantial growth in the number of practitioners, however, and location may become more important for establishing a successful practice.</td>
</tr>
<tr>
<td>Dentists</td>
<td>156,000</td>
<td>25</td>
<td>39,000</td>
<td>Employment expected to grow faster than average due to population growth, increased awareness of the importance of dental care, and pre-payment arrangements. Increasingly abundant supply of practitioners will make it more difficult to start a practice. Competition for patients is likely to be intense in some localities, which could adversely affect earnings.</td>
</tr>
<tr>
<td>Optometrists</td>
<td>29,000</td>
<td>27</td>
<td>7,700</td>
<td>Employment expected to grow faster than average due to the eye care needs of a growing and aging population, greater awareness of vision problems as a result of screening programs, and rising per capita income. Employment prospects will be favorable.</td>
</tr>
<tr>
<td>Physicians</td>
<td>476,000</td>
<td>23</td>
<td>109,000</td>
<td>Employment expected to grow faster than average due to the eye care needs of a growing and aging population. Prospects likely to be best in large group practices, health maintenance organizations, clinics, and other outpatient facilities. Most of these will be salaried positions; opportunities for solo practitioners will continue to decline. Substantial growth in the number of practitioners will produce competition for patients in some communities and medical specialties; earnings will be affected.</td>
</tr>
<tr>
<td>Podiatrists</td>
<td>11,000</td>
<td>39</td>
<td>4,300</td>
<td>Employment expected to grow much faster than average as greater public recognition of the profession causes more people to turn to podiatrists for foot care. Widespread participation in fast-moving sports, including jogging and tennis, and the growing number of elderly will also spur demand. Opportunities to establish new practices or to enter salaried positions should be favorable.</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>40,000</td>
<td>22</td>
<td>8,800</td>
<td>Employment expected to grow faster than average. New veterinarians may experience competition setting up a practice in some places, but opportunities for specialists, including toxicologists and pathologists, will be excellent.</td>
</tr>
</tbody>
</table>

SOURCE: Occupational Outlook Quarterly

1. What is this chart displaying?

2. What health profession is expected to have the largest percentage of growth?

3. What is one reason there will be a faster than average increase in the employment of chiropractors?

4. What professionals in the health field will be competing for clients?

5. About how many veterinarians were employed in 1984?
TEST TAKING TECHNIQUES
TEST TAKING TECHNIQUES

Introduction

Test taking techniques are vital to our study skills curriculum. If we spend months preparing our students for the GED test and then don't provide them with any test "survival" techniques, we have not completed what we started. Every part of Test Taking Techniques is important, but may we turn your attention to Taking an Objective Test and Taking an Essay Test. These two sections are excellent. In Taking an Objective Test, strategies for dealing with the multiple choice format are presented and should be thoroughly discussed with your students. Everything pertinent to the multiple choice test is included from how to read the questions to absolute and qualifying words to grammatical agreement. All information on the multiple choice test format is germane to our students' needs for the GED test.

The essay test information includes everything from budgeting time to reading the question carefully and correctly. The essay information provides sound techniques that are, again, pertinent to the GED test.

All of the information your students receive concerning test taking techniques can be shared with their children. Since most achievement in school is measured by some form of testing, and since parents are usually extremely interested in those results, the test taking techniques can help the children do better in school. The section on objective test taking will be of special interest to children in school. Your students need to become skilled with the multiple choice format for the GED test. Taking an Objective Test includes strategies for all types of objective tests. Besides the extensive section on how to deal with the multiple-choice format, Taking an Objective Test includes strategies for matching, true-false, and completion. Your students can share all of the test taking material with their children. This sharing of information will create good communication and interaction between parents and their children. A positive result should be better grades for the children in school and higher scores for the parents on the GED test.

We hope that you will incorporate this part of our study skills curriculum into your own study skills program with much enthusiasm and optimism. We have received so much positive feedback. Our students tell us that they are more comfortable and more self-confident about the actual taking of the GED test. One student told us that she felt she was better prepared to cope with the entire test taking process because she knew exactly what to expect. She said she was able to focus on the test itself and not on her fears or her nerves. She said she felt confident and able to think clearly. How pleased we are to hear comments like those! We hope you will experience the same enthusiastic responses from your students.
FEAR OF TESTS *

Felicia felt the knot in her stomach swell. She knew that in fifteen minutes she would be taking a weekly history quiz. As usual, she had studied hard, but her nervousness often prevented her from getting the A she felt she deserved. She always seemed to panic when she took tests. Even if she really knew the material, she would begin doubting herself as soon as she saw the questions.

Susan also felt nervous when she had to take a test. She knew that she wasn't always prepared. When it came time to answer the questions, she would try to finish as quickly as possible. She wouldn't carefully read each of the multiple choice answers, but would choose the first answer that seemed to make some sense. She always breathed a sigh of relief when she got to the end of the test and could finally hand in her paper.

Tests used to scare John. Although he still felt some nervousness when taking tests, John realized that to do well he had to remain calm. While the test was being handed out, he would close his eyes and breathe deeply three times. This helped to relax him. He would then remind himself that he had studied and had used the new study methods he had learned. Realizing that he knew the material always helped build John's confidence. By the time the test was handed out, John would feel far more confident.

HOW NERVOUS ARE YOU?

Everyone has felt nervous about a test at one time or another. But some students worry about almost every test they take. This fear, or anxiety, can cause them to do poorly, even if they are well prepared for the test. Because they do poorly, these students will probably feel even more anxiety the next time they have to take a test.

Below you will find a checklist to help you understand how you react to tests. Complete the checklist to rate your "anxiety level."

TEST-TAKING CHECKLIST

Code

0 = Never   1 = Sometimes   2 = Often   3 = Always

1. I don't feel that I study properly for tests.
2. I begin to feel nervous several days before a test.
3. My nervousness increases on the day of the test.
4. I feel that I will do poorly on tests.
5. If I don't know an answer, I begin to panic.
6. I get confused while taking tests.
7. Even if I have studied, I feel unsure of my answers.
8. I forget information that I have studied.
9. While I'm taking a test, I tell myself that I don't know the answers.

Total Points

INTERPRETING YOUR TESTING STYLE

A score of 12 or more could signal a high anxiety level. Your nervousness and confusion may be causing you to do poorly on tests. You may be convinced in advance that you will fail the test. If you have difficulty with a question, you may become so upset that you can no longer concentrate.

How can you break this cycle of fear? The first step is to be prepared for the test. Now that you are using the Active Thinking Method and the Note-Taking system, preparing for a test is much easier. You've already done a lot of the work!

Let's find out how you do on a test covering the article "The Lady Pharaoh of Egypt." You have already used the Active Thinking Method while reading the article, and you have used the Note-Taking system to guide you in taking notes. Without actually studying the material, you already know quite a bit about it. Take the test without any further preparation.
Before you take the test, try an experiment. Follow these steps:

1. Close your eyes for thirty seconds and take a deep breath.
2. Hold the air in your lungs for about five seconds and then slowly exhale.
3. Do this three times.
4. Keep your eyes closed for another thirty seconds.
5. Remind yourself that by using the Active Thinking Method and the Note-Taking system, you have already started to study the material.

Because you have used the Active Thinking Method, you understand the material. Because you have used the Note-Taking System, you have identified the important information. You're now ready to show what you know!

SAMPLE TEST

1. When did the Lady Pharaoh of Egypt live?
   a. in the 18th century
   b. during the first century
   c. thirty-five hundred years ago
   d. 1066 A.D.

2. Thutmose I, Hatshepsut's father, was worried about
   a. providing a strong leader to rule Egypt after his death
   b. finding a new wife
   c. paying for his travels throughout Egypt
   d. finding someone to marry his daughter

3. Thutmose I wanted ______________ to be ruler of Egypt.
   a. Thutmose II
   b. Hatshepsut
   c. his wife
   d. Thutmose III

4. When Thutmose I died, Hatshepsut discovered that she didn't have enough power to rule alone and was forced to
   a. give up the throne
   b. plot to overthrow the government
   c. marry her half brother Thutmose II
   d. choose the next Pharaoh
5. What happened in Nubia?
   a. The people of that country refused to trade with Egypt.
   b. There was an uprising which Hatshepsut crushed.
   c. The Egyptian army was defeated by the rebels.
   d. Hatshepsut built monuments there.

6. When Thutmose II died,
   a. Thutmose III immediately became Pharaoh
   b. war broke out
   c. the people elected a new Pharaoh
   d. Hatshepsut had herself declared Pharaoh

7. During Hatshepsut's reign,
   a. the country became very poor
   b. there were many wars
   c. many monuments were built
   d. the people became unhappy

8. An obelisk is a
   a. huge, four-sided stone pillar
   b. mortuary temple
   c. type of spear
   d. gold piece of jewelry

9. Hatshepsut wanted to send an expedition to Punt because
   a. the people there were revolting against Egypt
   b. her ancestors had always hated the people of that country
   c. her navy needed something to do
   d. she wanted to trade with that country

10. Thutmose III
    a. never wanted to become Pharaoh
    b. plotted to overthrow Hatshepsut
    c. was a feebleminded ruler
    d. wanted his mother to be Pharaoh

11. Hatshepsut's decline began when
    a. Thutmose III and the priests plotted to undermine her
    b. she became too old
    c. the people became unhappy with her
    d. she began constructing monuments to herself
12. Thutmose III and the priests made it appear that
   a. Hatshepsut had built the monuments for the wrong reasons
   b. Hatshepsut was a goddess
   c. the statue of a god had chosen Thutmose III to rule
   d. Hatshepsut was not sufficiently religious

ANSWERS

1. c  5. b  9. d
2. a  6. d  10. b
3. b  7. c  11. a
4. c  8. a  12. c

DISCOVERING HOW SMART YOU ARE

Are you surprised at how well you did on this test? You shouldn't be. Without knowing it, you have already done a lot of the work involved in studying for a test. The Active Thinking Method and the Note-Taking System have helped you learn much of the basic material. They form a solid foundation for further preparation. Of course, memorizing key facts and reviewing important concepts are also an essential part of studying for tests.

If you didn't do well on this test, do a little detective work to find out why. Perhaps you didn't read the questions and answers carefully. Perhaps you worked too quickly as you read the article or when you took notes. Look back in the article to find the correct answers to the questions you missed. Once you discover why you missed certain questions, you will know how to avoid those same mistakes in the future.

DIFFERENT TYPES OF TESTS

Teachers use many different types of tests to determine how much information you understand and remember. The multiple-choice test, which you have just practiced, is one of the most common. Several other types of tests are described below.

Short Answer Tests

Question: Tell why Hatshepsut ordered an expedition to Punt.

After having used the Active Thinking Method and the Note-Taking System you should be able to answer this question in a sentence or two.

Answer: Hatshepsut ordered an expedition to Punt because she wanted to reopen the trade routes.
True/False Tests

Question: Hatshepsut wanted to share power with her husband Thutmose II.

True False

Answer: False

Essay Tests

Question: Describe how Thutmose III undermined Hatshepsut's rule.

Answer: Thutmose III and the priests plotted to overthrow Hatshepsut. During a religious ceremony the priests were carrying the statue of a god. The statue stopped suddenly in front of Thutmose and seemed to bow before him. The priests said that the god had chosen Thutmose to be their ruler.

Although you haven't studied the material in the article "The Lady Pharaoh of Egypt," you probably could have answered all three of these sample questions simply because you used the Active Thinking Method and the Note-Taking System. The Active Thinking Method and the Note-Taking system will help you prepare for all types of tests.

BUILDING CONFIDENCE

Three Basic Steps for Test Preparation

1. Use the Active Thinking Method to help you understand and remember the material as you read it.

2. Use the Note-Taking System to help you identify, organize, and remember important information.

3. Review your notes several times before the test.

Four Basic Steps for Reducing Test Anxiety

1. Close your eyes before you begin the test.

2. Take a deep breath and hold it for five seconds. Slowly let out the air. Do this three times.

3. After the third breath, keep your eyes closed and remind yourself that you are well prepared for the exam.

4. Imagine the teacher handing back your test with a good grade on it.
People become confident about doing something when they have had some success at it. When you begin to do well on tests, your confidence will improve.

The three basic steps for test preparation will make your studying easier. The four basic steps for reducing test anxiety will help you remain calm when you take a test. As you practice the steps, you should find that you are doing better on tests and that you are becoming more self-confident.

Below is an optional experiment. The experiment involves reviewing your notes on the article "Newgrange-An Example of Ancient Science" and then taking a test of the material. You do not need to do this experiment if you do not want to. However, it might be valuable for you to see once again how much progress you have made. The decision to do Experiment 3 is yours.

EXPERIMENT 3
Quickly reread the article "Newgrange-An Example of Ancient Science." Then spend approximately five minutes reviewing your notes. Then take the following test.

TEST

1. Ancient people were always primitive.
   True       False

2. Newgrange was
   a. a burial mound
   b. a town in Ireland
   c. a building
   d. an ancient civilization

3. Newgrange was built
   a. about four hundred years ago
   b. about 2500 B.C.
   c. in the first century
   d. in the Middle Ages

4. Corbeling was used to
   a. bury the dead
   b. glue the stones together
   c. keep the chamber dry
   d. create calendars

5. The hole above the door was used to indicate the longest day of the year.
   True       False

6. The capstone
a. formed the roof of the chamber
b. was a calendar
c. was a chamber in the mound
d. was the captain of a ship

7. The ancient people who built Newgrange had an understanding of astronomy
   True     False

8. Archeologists
   a. help build monuments
   b. study astronomy
   c. study ancient civilizations
   d. help solve construction problems

9. The calendar that the ancient people of Ireland used was written on the wall of Newgrange's inner chamber.
   True     False

10. The passageway leads to the center of the mound.
   True     False

11. How is Newgrange an example of ancient science?

   Newgrange is an example of ancient science because it was planned and built in such a way that the interior has remained dry for thousands of years. Newgrange also served as a simple calendar for the ancient people of Ireland. These people were able to use their knowledge of engineering and astronomy to build this monument.
* Although the wording of your essay answer may be somewhat different, your answer will still be correct if it contains the same basic information and if you have communicated the information clearly.

WHAT YOU HAVE LEARNED IN THIS CHAPTER

1. Three steps for test preparation
2. Four steps for reducing test anxiety
Three thousand five hundred (3500) years ago, there lived a courageous woman named Hatshepsut (Haf-shep-sut). She not only dared to declare herself queen of Egypt but also had the courage to make herself Pharaoh.

THUTMOSE I

Hatshepsut was born around 1503 B.C. She was the daughter of Thutmose I (Thut' -mos), the Pharaoh of Egypt, and his wife Amose (O'-mos). As a child, Hatshepsut adored her father. He was a mighty warrior who had kept Egypt safe from outside invaders and had helped the country become prosperous.

As Thutmose I grew older, he began to worry about who would rule over the land he loved so much. He had one son, Thutmose II, who was Hatshepsut's half brother. But Thutmose II was weak, somewhat lazy, and not too interested in learning how to run the government.

CROWN PRINCE

Hatshepsut, unlike her brother, was a bundle of energy! She was fascinated with government and with the responsibilities of leadership. Because of these qualities, Thutmose I had her educated as a son. Not only did she learn to read and write, but she also excelled in the soldier's arts: horseback riding, hunting, throwing spears, and driving chariots.

Thutmose I wanted the people to accept Hatshepsut as their ruler. When he declared that Hatshepsut would be his successor, he named her the "crown prince." He then took her on a goodwill tour of Egypt in order to present her to his people.

Everywhere that Hatshepsut went, the people spoke of her radiant beauty. They recognized her authority and her ability. The trip was a huge success. Hatshepsut returned home more convinced than ever that she was destined to rule Egypt.

Unfortunately, when Thutmose I died, Hatshepsut discovered that she did not have enough power to become Pharaoh. Her brother Thutmose II was named Pharaoh, and Hatshepsut was forced to marry him. (In Egypt during this period, it was not unusual for royal half brothers and sisters to marry.) Although Thutmose II held the title of Pharaoh, it was Hatshepsut who actually governed the country.

NUBIA

The authority of the new Pharaoh and his bride was quickly challenged. There was an uprising in Nubia, a neighboring country under Egypt's rule. Most historians agree that Hatshepsut herself led her army into a victorious battle in which the Nubians were crushed, and all of their chiefs were captured and killed.
HATSHEPSUT BECOMES PHARAOH

Thutmose II and Hatshepsut had two daughters but no sons. Because Pharaohs often had many wives during this period, Thutmose II did have a son, named Thutmose III, by a lesser wife. Thutmose III was a strong, healthy child who resembled his grandfather more than his weak father, Thutmose II.

Thutmose II lived for only a few more years. When he died, it was assumed that Hatshepsut and Thutmose III would rule together until Thutmose III was old enough to rule alone. Hatshepsut had other plans. Realizing that Thutmose III was too young to object, Hatshepsut had herself declared the only Pharaoh. She took complete control of the country and placed her friends and advisors in important positions. To strengthen her claim to the throne, she often wore men's clothing. She would wear a helmet and even a false beard like the false beards that had been worn by earlier Pharaohs. Because of her efforts to act and dress like a man, her subjects actually referred to her as "His Majesty."

BUILDING PROJECTS

Hatshepsut's reign was a time of peace and prosperity. Because her family had established a tradition of building great monuments, Hatshepsut devoted a good deal of time and money to her building projects. She rebuilt many of the ruined temples in her country. Her personal architect designed a mortuary temple for her which even today is considered to be one of the most beautiful in Egypt.

Hatshepsut also commissioned two huge obelisks to be built. An obelisk is a huge, four-sided stone pillar which can stand over 50 feet high and comes to a point at the top. Each obelisk was cut out of a single piece of rock, floated down the Nile River, and then carefully raised into place. This entire process took only seven months!

Hatshepsut wanted the obelisks to be completely covered with gold so they would reflect the rays of the rising sun. The cost for doing this, however, was too great. Hatshepsut had to content herself with covering only the tips of the obelisks with gold. Today, one of these obelisks still stands and is the tallest monument in Egypt.

EXPEDITION TO PUNT

Perhaps Hatshepsut's greatest accomplishment was the expedition she sent to the land of Punt. As a child, Hatshepsut had heard countless stories about how her ancestors had traded with the people of that country. But the knowledge of the trade routes had been lost, and no one knew where the land of Punt was located.

Hatshepsut was determined to open trade once again with the people of Punt. She outfitted five ships with her most capable sailors. She sent them off with instructions to find the land of Punt.

The ships were gone for three years. Finally, they returned laden with fabulous treasures. These treasures included myrrh trees, monkeys and baboons, panther skins, ebony, ivory, gold, and other precious objects. As a result of this expedition, trade was reopened between the two countries, and Egypt acquired great wealth.
THUTMOSE III GAINS CONTROL

The people of Egypt grew wealthy under Hatshepsut's rule. Despite this prosperity, a deadly struggle was beginning. Thutmose III was growing up and wanted the power that he thought was rightfully his. Hatshepsut, however, was too strong to be overthrown. So Thutmose III and some of his priests designed a plan to undermine her. One day, during the daily ceremony in the temple, the priests were carrying the statue of the Egyptian god Amun. Suddenly the statue seemed to be searching for someone. When it reached the place where Thutmose was standing, the statue stopped abruptly and bowed low before him. The priests explained to the people that the god had chosen Thutmose III to be their king.

This incident marked the beginning of Hatshepsut's decline. Thutmose III's power grew stronger and stronger, and he began to gain more influence in the country. Although it is known that he took over the throne, it is not clear how he finally did so. Did Hatshepsut die of natural causes? Or was she murdered or simply overthrown? Most of the hieroglyphics that tell the story of Hatshepsut have been scratched out. Perhaps Thutmose III had this done in order to erase all mention of the woman who had kept him from the throne for so long.

It is fairly certain that Hatshepsut died in the year 1482 B.C. She left behind a healthy, happy, and wealthy country. In becoming Pharaoh of Egypt, she had accomplished what no woman before her had done. Because of these achievements, Hatshepsut must be considered one of the most extraordinary women in history.

NEWGRANGE-AN EXAMPLE OF ANCIENT SCIENCE

Scientists who study ancient civilizations can learn a great deal about the people who lived thousands of years ago. They do this by studying the monuments that these people created. These scientists, called archeologists, have learned that many ancient cultures were not as primitive as people might think. In some cases, the people who lived long ago were capable of creating and building monuments which are quite sophisticated and complex.

A UNIQUE BURIAL MOUND

An ancient structure which reveals a great deal about the people who lived thousands of years ago is called Newgrange.

Newgrange is an ancient burial mound. Located on the eastern side of Ireland, just north of Dublin, Newgrange was built around 2500 B.C. The structure consists of a high mound of earth that is 42 feet high and 300 feet in diameter. The entire mound covers more than an acre of land.
Newgrange is entered through a door on the south side of the mound. The door opens into a low, narrow passageway, 65 feet in length, which leads to the center of the mound.

At the center of the mound is a domed chamber. This chamber is 20 feet high and is made of stone. It was probably used as a burial place for the most important people of the tribe. Although the weather in Ireland can be very damp, the chamber is dry, even after four thousand years! The builders of Newgrange had discovered a method of construction that ensured that the center of the mound would stay dry.

WATERPROOFING TECHNIQUES

The chamber in the center of the mound was constructed using a special process to keep it dry. This chamber resembles an upside-down bowl made of rough boulders. The builders started with a ring of these large stones, and then added one ring after another to the base. With each new layer of stones, the diameter of the circle became smaller and smaller, until finally, only a single capstone was needed to form the roof. This process of building the chamber is called corbeling.

The outside edges of the stones were slanted downward, and narrow grooves were cut in the stones forming a drainage channel. The entire structure was covered with earth. When it rained, any water leaking through the earth to the stones below would run down the grooves to the base of the mound. Thus, water was kept from leaking into the chamber.

USING ARCHITECTURE AS A CALENDAR

A small rectangular hole above the door at the entrance of Newgrange puzzled archeologists for many years. At first, they thought that food was dropped through the hole into the passageway for the dead people who were buried in the mound. They later concluded that this theory was wrong.

One of the archeologists suspected that the hole had something to do with astronomy. He discovered that each year on December 21, the shortest day of the year, the first rays of the rising sun would strike the hole above the door. As the sun rose, its rays would shine through the hole and creep along the passageway until the entire chamber was finally illuminated. After seventeen minutes, the light would quickly recede, and the chamber would return to total darkness for another year.

A LASTING MONUMENT TO ANCIENT SCIENCE

The builders of Newgrange must have been keenly aware of the sun and the changes in its position throughout the year. As primitive as they were, the people of ancient Ireland knew enough about engineering and astronomy to build a structure that was so perfectly in line with the sun that a chamber deep within it could be touched by the sun's rays one day each year. Perhaps the most amazing thing is that Newgrange still stands after thousands of years as a monument to ancient science.
SYNOPSIS OF TAXONOMY OF QUESTIONS *

Underlying Ideas

1. All thinking can be classified into seven kinds, which have been named memory, translation, interpretation, application, analysis, synthesis, and evaluation.

2. All categories of questions fit all subjects.

3. Every category of questions has both easy and difficult questions. Thus, everyone can experience questions on every level.

4. The definitions of the seven kinds of questions overlap somewhat so that equally knowledgeable experts often differ on the best classification of a certain question. This need not bother you.

5. By knowing the definitions of the kinds of questions, you can learn how to respond to these varying levels of questions.

6. The word question refers to any intellectual exercise calling for a response; this would include both problems and projects.

MEMORY

A memory question asks you to recall or recognize ideas presented to you previously in reading or listening. Memory questions can require you to recall a single fact or a much more involved idea.

Examples

1. Conditions for this question: The teacher has given the definitions of solid, liquid, and gas. Examples of each were displayed.

   Question: What is the definition of a solid, a liquid, and a gas?

2. Conditions for this question: You have drilled on your multiplication tables.

   Question: Solve these problems: \[ \begin{array}{ccc}
   5 & 2 & 6 \\
   \times 4 & \times 6 & \times 7 \\
   \end{array} \]

TRANSLATION

In translation you are presented with an idea and then asked to restate exactly the same idea in a different way.

Examples

1. Conditions for this question: You have read a paragraph in the textbook.
   Question: Now tell me in your own words what you read.

2. Conditions for this question: The teacher demonstrates the operation of a siphon.
   Question: Draw a picture of a siphon you were shown.

INTERPRETATION

The question asks you to compare certain ideas or to use an idea that you studied previously to solve a problem that is new to you. The idea may be in the form of a skill, definition, law, rule, or generalization. You do not have to figure out which idea is to be used in interpretation because the question or the classroom context tells this. The questions can be in short-answer or discussion form. Usually the answer is quite objective. In other words, there is usually a right answer, which the teacher expects you to reason out.

Example

Conditions for this question: After seeing a film on customs of marriage and bringing up a family in an African society, you are asked:

Question: In what ways are the marriage and family customs in the movie similar to those in our society, and in what ways are they different?

APPLICATION

Application questions are similar to interpretation questions in that you are to use ideas learned previously in problems new to you. However, application goes one step further. In an interpretation question you must show that you can use an idea when told specifically to do so. In an application question you must show that you can use an idea when not told to do so, but when the problem demands it. In other words, application calls for the transfer of learning to new situations.
Example

*Conditions for this question*: In language-arts class the teacher has taught you how to use an index and table of contents. Later in a social-studies class the teacher asks this question:

*Question*: Find the page in our social-studies book that tells about Booker T. Washington. (The question would have been interpretation if asked this way: Use the Index to find the page in your social-studies text that tells about Booker T. Washington.)

**ANALYSIS**

Analysis questions are always preceded by instruction in some logical process. Some of the most useful logical processes are classification, induction, deduction, cause and effect. An analysis question asks you to solve a problem with a conscious observance of the rules for good thinking of the type called for by the problem.

Example

*Conditions for this question*: You have been given explanations of three rules for classification: (A) Vocabulary clear in meaning; (B) Sufficient classes to include all data, and (C) Classes discrete.

*Question*: What problems do you see in grouping mankind under the headings of while race, black race, and yellow race?

**SYNTHESIS**

The question asks you to create something. The product to be created may be a physical object, a communication, a plan of operation, or a set of abstract relations. In other kinds of thinking there may also be products, but the distinctive thing about synthesis is the great freedom you have in deciding what is to be created and how it is to be created. A synthesis question never has one correct response. There are always many good answers that you may work out.
Examples

1. *Conditions for this question*: Your class has read a story called "Indian Bill." One student said he didn't like the way the story turned out. The teacher then assigned this synthesis question:

   *Question*: Write a different ending to the story of "Indian Bill."

2. *Conditions for this question*: A box is to be inserted into the cornerstone of a new school. The students in your class are in charge of filling the box with things that show what it is like to go to school at the present time.

   *Question*: What do you think should go into the box?

**EVALUATION**

You are asked to make a value judgement of some product, communication, event, or situation. By a value judgement is meant a rating of something as being good or bad; in other cases the judgement is of right or wrong, or perhaps beautiful or ugly. Part of the answer always requires you to tell what considerations led you to that judgement. A value judgement is never provable. The best that can be done is to present good supporting evidence.

Examples

1. *Conditions for this question*: You have studied the colonial period of United States history.

   *Question*: Did the colonists do right in throwing the tea overboard at the Boston Tea Party? Tell why.

2. *Conditions for this question*: You have read a story about two brothers. One is a good athlete but a poor student. The other is a good student but clumsy and weak.

   *Question*: Which of these brothers would you rather be? Tell why.
LEVELS OF QUESTIONING “ACTIVATOR”—THE WEB

TRANSLATION
(Restate same idea)

INTERPRETATION
(Use known when told)

MEMORY
(Recall)

TRANSLATION

INTERPRETATION

SYNTHESIS
(Put together the new)

APPLICATION
(Use known when not told)

EVALUATION
(judge)

APPLICATION
(Take apart the known)

SYNTHESIS

ALEXANDER


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ESSAY ESSENTIALS *

Essay questions require unique treatment. In addition to applying the general test-taking hints, to be thoroughly equipped to attack that essay question or test, an invaluable aid is your knowing the meanings of key terms.

Quickly skim the left-hand column and put an X in front of each word whose definition you don’t think you know. Then read thoughtfully through this entire section, adding Xs whenever definition differ from what you anticipated. In the end, you’ll need to review only the “marked” terms.

Compare: to cite both points of similarity and of difference.
Contrast: to stress differences.
Criticize: to point out both the positive and negative sides.
Define: to give a clear, concise meaning for a term.
Describe: to relate something in sequence or story form.
Diagram: to organize in some pictorial way—a flowchart, a chart, or some other graphic device—the parts and relationships of a set of facts or ideas.
Discuss: to examine and talk about an issue from all sides; must be carefully organized.
Enumerate: to write in list or outline form; numbering helps.
Evaluate: to make a value judgment, a statement of negative and/or positive worth; requires evidence for your opinion.
Explain: to clarify, to interpret, to analyze; emphasis on cause-effect relationships and sequence.
Illustrate: to show by means of a picture, a diagram, or some graphic aid; to relate specific examples.
Interpret: to explain, translate, or show a specific application of a given fact or principle.
Justify: to tell why a position or point of view is right; should stress the positive.
List: like enumerating, but requiring a formal numbering of sequence.
Outline: to organize a set of facts or ideas in terms of main points and subordinate points; a formal outline is suggested.

Prove: to give evidence, to present facts, to use logic as a basis for clear, forthright argumentation.

Relate: to show how two or more things are connected to one another through similar causation, similar results, or similar characteristics.

Review: to re-examine or summarize the key characteristics or major points of an overall body of facts, principles, or ideas.

State: to present a brief, succinct statement of a position, fact, or point of view.

Summarize: to give the main points relevant to an issue in condensed, abbreviated form, without details or examples.

Trace: to present in sequence a series of facts somehow related, in terms of time, order, or cause-effect.

To successfully write an essay test response, you must not only know the material but also think about and organize it effectively. The procedure that follows may aid you in becoming an "essay success"!

<table>
<thead>
<tr>
<th>Personal Analysis</th>
</tr>
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</table>

- **Underline Key Terms**
  
  As you read and underline the key terms that tell you what to do (criticize, trace, discuss), also underline key terms in the content of the question itself. Here is a sample essay question: "In our educational system, we need to return to the basics of reading, writing, and arithmetic. Defend or refute this statement."

  The topic is returning to basics; that is underlined to be certain that you don't wander from the subject. "Defend" and "refute" specify how to approach that subject.

- **Jot Down Ideas**
  
  As soon as you have read each essay question, immediately jot down relevant thoughts that occur to you. This safeguards you from forgetting as you quickly read other essay questions to find the easiest one, which you'll want to tackle first. If the question is one of your predicted ones, you're ready to write!
| - Take the Plunge | Commit yourself immediately—there's no time to pussyfoot! "I firmly defend the need to return to the basics of reading, writing, and arithmetic, based on school and college entrance results and my own personal experience," is a lucid thesis statement that promptly informs the teacher where you stand. This direct approach also helps you keep sharply focused on the question. If the essay is to be brief, this thesis may stand alone as the introduction; however, if the essay is to be extended, this sentence can be included in a longer introductory paragraph. |
| - Fatten Up the Thesis | Organization should flow logically from the thesis. Clearly state a central thought within each paragraph in the body. Use transitional words and phrases to keep your argument starkly clear, e.g., "In the first place, the results from reading tests administered to fourth and twelfth graders this year seem to indicate the need for more basic reading instruction." This sets clear direction for the facts that will make that topic sentence live and breath. Beginning the next paragraph with a phrase such as "In the second place" or "In addition" helps the reader see you steadily accumulating evidence for your case. |
| - Conclude | No cliffhangers, please! After stating your case, wrap it up in a sentence or two with a statement of conviction: "Because of the declining scores from grade school to college entrance exams and because of the personal experiences I've cited, I staunchly affirm the need to return to the basics of reading, writing, and arithmetic." |
Persevere

Despite every effort, if you still run short of time, never give up! Resort to mapping or outlining to confirm your knowledge of the subject. Teachers do usually give partial credit for such attempts.

Quickly proofread for legibility, correct grammar, and accurate punctuation. Hurrah! You've done it!
REVIEWING FOR TESTS AND EXAMINATIONS

1. Do not cram for a test. Last ditch stands and mad kamikaze dives at studying are counterproductive.

2. Study from your notes, a well-marked textbook, and your previous quizzes, themes, and papers that have been conveniently filed.

3. Improve on future tests by carefully going over all returned papers and correcting the mistakes. For the final, concentrate your study on any recurring ideas.

4. Material covered in BOTH text and lectures is most likely to be on the test. Also probable are topics of class discussions and lectures which supplement the text. Probable, too, are topics in your text emphasized by dark type or italics, questions at the end of chapters, or ideas repeated in summary paragraphs.

5. Listen in class for telltale signs of which subjects to review for the test.

6. Select the important subject matter and concentrate on it, not on the unimportant details.

7. Try to anticipate the questions.

8. If your teacher allows you to study tests from past years, make lists of terms and concepts which are repeated. Then study these lists carefully.

9. Review by reorganizing course materials. Reduce subject matter into easily remembered divisions, such as:
   a. Math - definitions, theorems, formulas, word problems, etc.
   b. History - biography, dates, wars, economy, religion, fine arts, reform movements, etc.
   c. English - literacy types, vocabulary, grammar, etc.

10. Learn the terms and vocabulary of the course.

11. When synthesizing (or relating) knowledge, make a chart of information to be compared or contrasted. For example, in English, if you are studying Lord of the Flies, Huckleberry Finn, and Romeo and Juliet, you may wish to construct the following chart, which will help correlate major ideas.

<table>
<thead>
<tr>
<th></th>
<th>Lord of the Flies</th>
<th>Huckleberry Finn</th>
<th>Romeo and Juliet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protagonist</strong></td>
<td>Adolescents</td>
<td>Adolescents</td>
<td>Adolescents</td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td>During WWII</td>
<td>Pre-Civil War</td>
<td>Shakespeare’s time</td>
</tr>
<tr>
<td><strong>Place</strong></td>
<td>A jungle island</td>
<td>Missouri and Mississippi River</td>
<td>Verona, Italy</td>
</tr>
<tr>
<td><strong>Common themes</strong></td>
<td>Initiation into adult world</td>
<td>Initiation into adult world</td>
<td>Initiation into adult world</td>
</tr>
<tr>
<td><strong>Predominant symbols</strong></td>
<td>Conch, Piggy, eyeglasses</td>
<td>Mississippi River</td>
<td>Poison</td>
</tr>
<tr>
<td><strong>Parent-child relationship</strong></td>
<td>None - the stranded children are unsupervised</td>
<td>Huck &amp; Miss Watson Huck &amp; Pap Huck &amp; Jim</td>
<td>Romeo &amp; Juliet versus their feuding families</td>
</tr>
</tbody>
</table>
MEMORY

1. Recall depends upon study distributed over a long period of time.
2. Wake up earlier than usual before a test. One's remembering powers do not function well until one or two hours after awakening.
3. If possible, skim material one last time right before the test.

HOW TO REMEMBER

1. Re-read.
2. Reinforce re-reading by writing the material.
3. Discuss the material; use it in some way.
4. Put vital information like math formulas or chemistry symbols on note cards. Review from them.
5. Review the markings in your textbook.
6. REVIEW OFTEN, if briefly.
7. The more associations you make, the more you remember. If you attach the facts that Michael becomes the first Romanov Czar in 1613, Shakespeare died in 1616, Harvey lectured on the circulation of blood the same year, and the Pilgrims landed at Plymouth four years later in 1620, you will find it easier to remember all four details than if you study them separately.
8. Use memory devices.
   a. Alphabetical order
   b. Numerical order
   c. Chronological order
   d. Rhymes
   e. Utterly unreasonable order, so long as it means something to you.
9. Use memory schemes, if they help you. That is, associate what you need to memorize with a list you already know, like the eleven positions on a football team. For example, if you need to remember eleven capitals in Europe, you can associate Paris with the center, Rome with right tackle, London with left tackle, etc.
10. RECITE THE MATERIAL ALOUD.
TAKING STANDARDIZED TESTS - GENERAL ADVICE

1. Get a good night's sleep.
2. Get up an hour earlier so you will be alert.
3. Eat a good breakfast.
4. If you wear glasses, take an extra pair. Take contact lens fluid and cleaner if you wear contact lenses.
5. If you will work on an answer sheet graded by a computer, take several sharpened #2 pencils with you.
6. Take advantage of all breaks given between test sections. Do not socialize with your friends during breaks.
7. If you become tired or find your attention wandering, take a 10-30 second break to help you stay alert.
8. Wear a watch.
9. Note exactly when the test starts and jot down when you are supposed to be finished.
10. Panic is your mortal enemy. Common sense and good judgement are the best qualities you can bring to the test.

DURING THE TEST

1. Read the directions first.
2. Take the test THREE times. That is:
   a. First - Look over the test, check on the number and types of questions, and apportion your time.
   b. Second - Answer the questions you know readily.
   c. Third - Attempt to answer the questions you had trouble with.
3. NEVER LINGER OVER A QUESTION WHICH STUMPS YOU. COME BACK TO IT LATER.
4. Read all your choices.
5. Do not immediately decide that the first choice which looks attractive is the correct one. Put a dot (.) by it and consider the other alternatives.
6. If you can work one type of question most easily, do that type first.

7. Frequent erasing may be a sign of insecurity. Nine out of ten times your first choice is correct.

8. If you are working on an answer sheet, use these techniques:
   a. Do not doodle or put extra marks on the sheet. The computer can grade an extraneous mark as an error.
   b. Put your answers in the right place. Make sure #6 is in the row designated as #6, not #5 or #7.
   c. Be certain that you put the answer in the correct column.
   d. If you erase, make your erasure first, then record your new answer. Thus, you will not have two shaded areas for the same question and be penalized.

9. CHECK YOUR ANSWERS!
TAKING OBJECTIVE TESTS AND EXAMINATIONS

Objective tests include:

1. Short-answer test (of recall)
   Example: William Shakespeare was born in _____ at _____.

2. True and false
   Example: Peas are classified as legumes. True False

3. Multiple choice
   Example: Abraham Lincoln sponsored:
   a. The Declaration of Independence
   b. The Emancipation Proclamation
   c. The Taft-Hartley Bill
   d. The Missouri Compromise

   Answer: b

4. Matching questions
   Example:
   1. Trust-busting President  2. Lincoln
   2. Author of Oliver Twist  3. Abraham
   3. The Douglas Debates  4. Dickens
   4. Father of Isaac  1. T. Roosevelt
   5. Prime Minister during WWII  5. Churchill

TEST TIPS

1. Answer the questions you know first. Come back to any on which you wish to spend more time.

2. Wear a watch. Budget your time. Jot down when your allotted time will be up.

3. Pay attention to mechanical instructions that indicate WHERE and HOW to answer questions.

4. Read the questions and answer choices carefully.

5. Determine how the test is to be scored. Find out if certain items are weighted. That is, Part I with 30 questions counts 40%, but Part II with 20 questions counts 60%, spend more time on Part II. (If you have 50 minutes for the test, spend only 20 minutes on Part I and 30 minutes on Part II.)
6. Guessing - Always guess if there is no penalty. Do not guess if there is over-correction for guessing.

7. Re-read the entire test. Do not change answers unless you are reasonably certain that the original answer is incorrect.

8. Observe all qualifying words - Note broad, categorical words like all, usually, always, never, totally, no, and unique, which often indicate the choice is wrong.

9. Use the process of elimination. Put an "X" through an obviously wrong answer. Use this technique particularly in matching tests.

10. Be careful to notice the negative completion option. Write "T" by all answers you know are true, so you can select the correct one by elimination.

Directions: All statements are correct EXCEPT one. Identify the incorrect statement.

Example: All these states belonged to the original 13 colonies EXCEPT:


Answer: c

Remember: You are looking for the WRONG answer.

11. Use clues.

   A. Grammar

   (1) Singular/plural verbs

   Example: Which of the following hormones are steroids?

   a. estrogen  b. progesterone  c. testosterone  d. all of the above

   Answer: D The verb ARE indicates a plural answer.
(2) Indefinite articles "a" or "an"

Example: An example of a bivalve is an

a. mole
b. beaver
c. oyster
d. cat

Answer: C "an" must precede a word beginning with a vowel.

B. The correct answer may be the one which is:

(1) The longest or shortest in the series.

(2) In greater detail.

(3) In wording similar to the stem of the question.

C. The incomplete sentence when read with the answer choice should make grammatical, logical sense.

Example: The event which led to America's entrance in World War II was:

a. hostility towards Japan
b. Japan's bombing Los Angeles
c. the attack on Pearl Harbor
d. the sinking of the Maine

Explanation: Choice "a" is incorrect because it does not describe an event, so you can eliminate it. Answer: c

D. Look for a converse pair. One of the pair may be correct.

Example: In The Call of the Wild, Buck, the dog,

a. gets rabies
b. dies
c. becomes very tame
d. has a litter of puppies
e. becomes a wild animal

Answer: The answer may be "c" or "e" because they are a converse pair or direct opposites. The correct answer is "e."

E. In multiple-response questions use the process of elimination. Decide which alternatives are true; then narrow down the choices. Draw a line through the false answer (s).

Example: The city of London
a. is larger than Tokyo
b. is the home of Parliament
c. is the city in which Buckingham Palace is located

Answer: (1) a only  (2) b & c  (3) a, b, & c  
(4) c only  (5) a & c

Because you know "a" is wrong, you can eliminate answers (1), (3), and (5). You have narrowed your choices to (2) and (4), a good guess.

Correct answer: (2)

12. Use the content of other test items and answer choices to help you select the correct alternative. Let one answer remind you of another.
TAKING ESSAY TESTS AND EXAMINATIONS

1. Read through ALL the essay questions before you start to write.

2. Budget the time you think each essay will take and write the estimated time in the margin.

3. Re-read the first question to determine exactly what it asks you to do. You may wish to read it once more to be positive.

4. Be sure to interpret the question precisely. The following terms, with what each requires, are frequently found in essay questions:
   a. analyze - separate the topic into main thought divisions or important parts; rank their order of importance.
   b. classify - divide into main classes.
   c. compare - demonstrate similarities and differences.
   d. contrast - note differences only.
   e. define - explain meanings; you may wish to tell what something IS by telling what it is NOT.
   f. describe - using time sequence or spatial order, etc., portray the appearance of something. (Occasionally describe is interchangeable with explain.)
   g. develop - go into detail.
   h. discuss - explain, using many factual, specific details.
   i. distinguish - separate one term or concept from another.
   j. evaluate - give your opinion of the merit of a certain concept.
   k. explain - using factual, specific details, clarify and give reasons for.
   l. explicate - give the literary interpretation of.
   m. illustrate - explain by giving several examples of.
   n. interpret - explain the meaning or significance of.
   o. justify - defend
   p. prove - take an arguable point and substantiate it.
   q. review - cover all points, but do not go into as much detail as if one is explaining or illustrating.
   r. summarize - briefly review all essential points and perhaps draw conclusions.
5. Make a BRIEF key-word scratch outline of the answer.

6. Quickly check your scratch outline for order of topics, completeness, and accuracy.

7. Be certain you are writing on the topic. If you are asked about Alexander the Great's father's legacy (the army, the generals, the training he gave to his son), do not write about Alexander's conquests.

8. Give your answer an introduction, middle (with most of the facts), and an end or conclusion.

9. An effective opening statement restates part of the question. NEVER begin with a pronoun without an antecedent. (Fatal beginnings are "It is when..." and "It is because...")

10. Never retell the plot in an essay question based on literature. Use many details to support your generalizations.

11. BE NEAT!

12. Illustrations, details, facts, and explanations are necessary parts of a good essay answer.

13. Use good grammar.

14. Remember that quantity without quality will not earn a high grade.

15. Remember that you can usually write much more than time allows, so write your most important ideas first.

16. Leave room for additional information if time permits you to return to the question.

17. If you cannot remember an exact fact or date, write an approximation of it rather than an erroneous piece of data. That is, if you forget that the Spanish American War occurred in 1898, mention that it took place at the end of the nineteenth century.

18. If you do not know how to spell or use a word, use a synonym with which you are familiar.

19. CHECK OVER YOUR PAPER. Reserve ten minutes for a one hour test, twenty minutes for a two hour test, etc. Check for obvious factual mistakes and mechanical errors like spelling, misused words, or dates.
Every day there are hundreds of things that you need to remember: locking your locker, brushing your hair, keeping an appointment after school. Some of the daily tasks have become habits because you have been doing them for a long time. You don’t have to think about them. You automatically brush your teeth, get dressed, and have breakfast in the morning. Imagine if you forgot the routine and showed up for your first class with your bathrobe on!

Not everything that you have to remember is a habit. When your parents ask you to write to your grandmother or when you have to buy some tickets after school, you must make a conscious effort to remember these things. Unless you make a conscious effort to remember, you might forget.

SEVEN METHODS TO HELP YOU REMEMBER

The first group of steps will remind you that you have something to remember.

1. Review in your mind what you will need to take with you or do whenever you are going somewhere.

Stop before you walk out the door and ask yourself, "Do I have everything I need? What are the things I have to do today?" Keys, homework, money, and school books are all easy to forget. Making a conscious effort to think about your responsibilities and to organize them in your mind develops good memory habits.

2. Wear your watch or rings in an unfamiliar way.

If you always wear your watch or rings in a certain way, you become used to having them that way. If you switch your watch to the other wrist or wear a ring on a different finger, it will feel funny. The strange feeling will remind you that you have to remember something. Just don’t forget what it is you are trying to remember!

3. Ask someone to remind you.

This method will work only if the person you ask to remind you is reliable.

The second group of steps will help you to remember specific information.

4. **Write it down.**

   This is the best way to remember, especially if you have a long list of things to do, or if you have something very important to remember. Just make sure you don't lose the paper you've written it on!

5. **Say it to yourself, repeating each item at least five times.**

   Repeating a list out loud is even better than saying it to yourself. This technique is especially helpful for memorizing spelling or vocabulary words, history facts, and other types of information you may need to know for a quiz or an exam. Repeating things makes information stick in your memory.

6. **Create a picture in your mind of what you're trying to remember.**

   Later, when you need to remember, you can pull the picture from your mind. With this technique you can picture yourself doing something or picture the way something looks (such as a map of the United States). Details will be easier to remember this way. Visualization helps you to store what you're trying to remember.

7. **Make up a formula or sentence.**

   Music students, for example, who are trying to remember the lines and spaces on the treble clef (E.G.B.D.F) will often use each of those letters to make a sentence: Every Good Boy Does Fine. The sentence is easier to remember than the letters alone. Putting information into a sentence or formula can make remembering difficult information easier.

You will not use all these techniques at once. Different situations call for different methods, and you may find that one method works better than another for you. Below you will practice these memory techniques.

**PRACTICING YOUR NEW MEMORY TECHNIQUES**

Below are some situations which involve memory. In each situation, a different technique should be used. Match the situation to the technique which best fits the situation. Place the letter of the technique you have chosen in the space provided. Use each technique only once.

**Memory Techniques**

A. Review in your mind what you will need to take with you or do before you go anywhere.

B. Wear your watch or rings in an unfamiliar way.
C. Ask someone to remind you.
D. Write it down.
E. Say it to yourself.
F. Visualize.
G. Make up a formula or sentence.

Situations

1. You see a notice on a bulletin board for a free golden retriever puppy. You've always wanted one, but you never could afford the high price. You run to a phone booth to call and get directions to the house. You discover that you do not have anything to write on. How do you remember the directions?

2. You have a part in the school play. You have to memorize your lines. How do you remember?

3. You are going to the grocery store to buy food for the club's weekend trip. How do you remember the necessary supplies?

4. You and your sister are leaving the house for a day of hiking. Your mother reminds you both that you must take your allergy pills in two hours. How do you remember to take your pills?

5. School is over for the day. You're in a hurry to get home. You have several important homework assignments due tomorrow. How do you remember to bring home all the books you need to do your assignments?

6. You are riding your bike down the street. You see a car back out of a parking space, hit a car that is parked behind it, and leave a large dent in the parked car's fender. The driver of the car leaves the scene of the accident without leaving a note. You have seen the car's license plate, but you do not have a pencil and paper. How do you remember the license plate number?

7. You are in the garage, building some shelves for your room. Your father comes in to tell you that a friend has telephones and wants you to call back. You know that you won't be finished with your project for at least an hour. How do you remember to return the call?
Answers

(Remember, your answers may be different. You can use more than one technique in many of the situations.)

1. **F** As the person on the phone gives you directions, try to picture the streets (if you know them). Visualize the route you will be traveling. Also try to think of landmarks you know.

2. **E** Say the lines aloud, over and over. It's the repetition that helps you to memorize those lines.

3. **D** Making a list and writing it down is the best way to remember a lot of information.

4. **C** If your sister is reliable, the two of you can help each other to remember.

5. **A** Take the time to think about what you need to take with you before you leave school. It takes only a minute, and this extra time and effort may save you a lot of pain later on.

6. **G** Make up a sentence that has meaning using the numbers and letters from the license place. For example, if the plate is B 75 RFM, you could say But 75 roses for me!

7. **B** When you're in the middle of a project, you may not be able to write something down. Switching your watch or rings is an easy thing to do.

Stop right now and think about which techniques you use for remembering things. If you don't use all of these techniques, you may want to try them the next time you have to remember something.
Settle In

Arrive early enough to feel relaxed, yet alert when the test begins. If you can, avoid sitting near friends; they're usually a distraction. Depending on your psychological makeup, either do or don't review one last time some material that's difficult to remember. Some people prefer using the last minutes to review a complicated point so that they're ready to write it on the back of the exam as soon as it's passed out.

Take a few slow, deep breaths, then....

Personal Analysis:

Survey!

As soon as you've received your exam and written your name on it, survey the entire test in a minute or so to see what's ahead. The first time or two, forcing yourself to do this will be painful.

Yes, people around you may be writing away while you're still surveying, but they may also discover, 5 minutes before time is up, the 25-point essay question on the back of page 3 that you've already answered!

Personal Analysis:

Pace Yourself

After previewing, allot the time by quickly calculating how many minutes to spend on each section. This is based on the point value of each section. (If points are not indicated, ask your teacher. You have a right to know this information.) For example, during a 50-minute period:

Time Allotment:

- multiple choice = 30 points
- matching = 20 points
- two essays = 50 points

48 (+2 minutes to proofread)

Stick to your time schedule. Wearing your own watch facilitates this.

Personal Analysis:

Mark Up the Directions

Have you ever been penalized on a test because you wrote the answer to only one essay question instead of two? Or because you chose the best answer in multiple choice items instead of all the correct answers? If so, you already know that accurately reading the directions is crucial.

To encourage precision, underline the key facts in the directions, i.e., "In this essay section, of the 4 statements below, choose 2 on which to write." Choose and 2 are underlined because they state the boundaries within which you must operate.

Personal Analysis:

Pick Up Easy Points

Psychologically, you'll be on top if you answer first all the easy test items. Then go back to pick up the more difficult ones. With this strategy you may also run across clues to the tough questions. (Put a check in the margin before difficult items so you can rapidly relocate them.)

Unless there is a penalty for guessing, answer all test questions, even if you have to guess. Also, underline troublesome words if
you're having a tough time figuring out a question and ask the teacher for clarification. A few more tips?

**Multiple choice items:**
- Cross out wrong options.
- Read every option before answering.
- Seriously consider an extremely long or short option since it is often correct.

**True-false questions:**
- Items containing qualifiers such as *all, always, never, none* are usually false.
- Items containing qualifiers such as *some, sometimes, usually*, often are typically true.

**Completion items:**
- Do easy items first to eliminate them.
- Use grammatical clues (i.e., the word *an* signals an answer beginning with a vowel sound).
- Notice length of the blanks.

**Caution:** None of these tips is a substitute for your thorough knowledge of the subject matter on the test!

**Personal Analysis:**

**Trust the Teacher** Don't be paranoid. Unless you know otherwise, assume the teacher is forthright in asking you test questions. Focus on what is actually stated rather than what you might infer. For example, "Thomas Edison invented the light bulb - true or false?" Although the light bulb is only one of Edison's innumerable inventions, the teacher probably wants a "true" for that answer.

**Personal Analysis:**
Proof Your Answers

Give yourself a break: in the last few minutes of the hour, skim your exam to be sure that you've followed directions and answered all questions. This is the time to catch mistakes if you've forgotten to answer an item or underlined answers when they should be circled.

If you've written an essay, rapidly proofread, checking whether you've addressed the question and provided a thesis statement, adequate evidence that is clearly organized, and a conclusion. Also search for sentence fragments and run-on-sentences, omitted words, punctuation errors, that require your last-minute attention.

Congratulations - mission accomplished!

Personal Analysis:
TAKING AN OBJECTIVE TEST *

Now that you have completed the steps listed in Chapter 6 for organizing yourself to take the test, you are ready to begin. Having studied thoroughly (as described in Chapters 3 and 5) will be your best insurance that you will do well. There are some special techniques for taking objective tests, however, that the testwise student must know as well.

First, you need to have a strategy for taking the test; tuning the test in after you have gone through it once is not being testwise. In this chapter, you’ll learn how to pace yourself so you’ll have time to go through the test a second time and then make a final check before you turn it in. You’ll become a testwise student who knows steps for taking an objective test.

Then you’ll learn how to look for cues in the questions that will help you recognize the right answer. Some kinds of cues apply to several kinds of objective questions; other cues are specific to multiple-choice, matching, true-false, or completion questions. Finally, you’ll learn when and how to guess on questions that you are not able to answer from your knowledge and your search for cues.

Test Taking Steps

To give yourself the chance to answer correctly all the questions that you can, you need to budget your time (as was pointed out in Chapter 6). For an objective test, you’ll want enough time to go through it three times. First, go through and answer all the questions you know, spending an equal amount of time on each one and not getting bogged down on difficult questions. (If some test sections are worth more than others, however, allow more time for the sections worth more points. If you can’t tell how many points the sections or questions are worth, ask your instructor immediately.) The second time you go through the test, your goal is to try to answer the questions that you couldn’t the first time (later in this chapter you’ll find some cues to help you identify the right answer). The third time through, go back over your entire answer sheet and check for forgotten questions, stray marks, and misnumbered answers.

Budget Your Time

To figure out how to budget your time for a test, you first need to know how long the test session is. Subtract from that amount of time 5 minutes to read all the directions thoroughly, and to decide on your test-taking schedule. Subtract another 5 minutes for your final check. So if you had 55 minutes to take a test, you would subtract 10 from 55, leaving you 45 minutes for the first and second go-throughs.

To decide how much time you can spend on each question, you need to know how many questions are in the test, and then allot a little more time for the first go-through than for the second. For example, if your test had 50 objective questions worth two points each, you could spend half a minute on each question the first time through, which would total 25 minutes. That would leave you 20 minutes for the second go-through. If you made a diagram of your test-taking schedule, it would look something like this.

10:00 5 minutes to read all directions and to plan schedule
10:05-10:30 25 minutes to answer questions in first go-through (1/2 minute per question)
10:50-10:55 5 minutes to do final check

Read the Directions

Read all the directions carefully before you start to answer any question. If there are directions for each section of the test, reread them before you begin to answer any questions in the section.

Read the directions critically; don't assume you already know what they say. For example, on a multiple-choice test, it is easy to assume that you are to select the best answer. The directions, however, might tell you to select the least appropriate answer. Or you might assume that for true-false items, you are to indicate "T" or "F." But the directions might tell you to answer "yes" or "no," or to add or delete words from all false statements to make them true. Or you might assume that for matching questions you are to match the Column 2 items to the Column 1 items by writing the letter or number from Column 2 next to its match in Column 1 to its match in Column 2. In short, if you ignore the directions, you might not get credit for your answers even if you knew the material thoroughly.

Your First Go-Through

Now that you have read the directions carefully, and planned a schedule for taking the test, you are ready to begin answering questions. On this first go-through, you will answer the questions that are easy for you. But remember to read all the choices for each question before answering, even if you think you have spotted the right answer. (It is strongly recommended that you take an objective test in pen.) Keep the following points in mind as you work your way through the test the first time.

- Attempt every question, but answer only the easiest ones the first time through. Remember that questions that look difficult and involved may turn out not to be. Work through the entire test item by item, no matter how hard some of them may appear; spend your allotted time on each question.

- Read each question thoroughly and critically. The difference between a right and a wrong answer can often be a single word.

- But don’t overinterpret questions. The more time you spend laboring over a question, once you have read it carefully, the more likely you are to read something into it that’s not there. Students sometimes think that the right answer is too obvious and that the instructor must be trying to trick them. Most instructors don’t do this. The right answer may seem obvious simply because
you know the material well.

- Establish a system for going back to questions later. This will help you with your second go-through. If you answer a question and then feel a little unsure about it, put a small pencil dot next to it. On a multiple-choice test, you might have narrowed down the answer to a couple of alternatives; mark them with a light pencil check so you can save time during the second go-through by ignoring the alternatives you're sure are wrong. For matching questions, you might lightly check the items still to be matched. For true-false and completion questions, you might lightly check the ones you think you have an answer for (there might be cues in later questions that could confirm this answer) and put a small dot next to those you have no idea about. Whatever the symbols, it is important to make some signposts for the second go-through.

Your Second Go-Through

As soon as you have gone through the last item on the test, you are ready to begin your second go-through. If you have been following your schedule, you should have time to go back to all the unanswered questions, starting with those at the beginning of the test.

Do not be concerned if other students finish the test before you do. They may be finishing faster because they know the material better, but it is just as likely that they have finished early because they do not know the answers to many of the questions. So don't compare yourself to other students; it will only make you unnecessarily anxious and waste your time!

On your second go-through, first go back to those questions you’ve checked—the ones where you’ve narrowed down alternatives or have some idea of what the right answer might be. These are the questions that will be the easiest to answer, so you want to be sure to have time to do so. Then, if there’s time, go back to those questions with a small dot—the ones that seem extremely difficult.

Here are some tips to help you decide on the best answer to questions about which you feel unsure. Your goal in this second go-through is to answer as many questions on the test as you can.

- Read the directions for the section and the question again. Make sure that your difficulty with the question is not due to misreading the directions or the questions.

- If the question seems particularly complicated, underline key words. Sometimes emphasizing the key words will help to clarify the main idea of the question.

- Put difficult questions into your own words. Sometimes rephrasing a question can make it clear. But be careful not to inadvertently change the meaning.

- If a question is not clear in spite of all your efforts to understand it, ask your instructor. It is possible that a word might be missing or that there is a typographical error. (You can't ask the instructor for clarification of standardized tests, however, since the instructor must keep everything "standard" and cannot give special help to just one student.)

- Reason through each question. An acceptable alternative can be selected by a process of reasoning, knowledge, and elimination. For example, in multiple-
choice or matching questions, balance the alternatives against each other, the differences may help you judge which is the best answer.

- Try to recall your class lectures. It is sometimes helpful to try to recall what your instructor said about the subject of a question that seems particularly difficult. Based on how your instructor presented the subject in class, try to figure out which answer he or she intended to be right.

- Look for cues to help you answer the question. Later in this chapter, you will learn about these cues, which include grammatical agreement, synonyms, qualifying and absolute words, position of alternatives, and inter-item cues.

- Don't be afraid to change an answer if, after going through the test the first time, you have reason to believe your first answer is wrong. Research shows that students who change their original answer choices because of careful reconsideration and discovering inter-item cues do increase their test scores. The key to successfully changing answers, however, is the ability to recognize the difference between a good reason to select a different answer and uncertainty about which is the right answer. Some students are better at recognizing this difference than others. To assess your ability to change answers for the better, save a few tests and compare the number of times you changed a wrong answer to a right one with the number of times you changed a right one to a wrong one.

Final Check

After having worked so hard to study for and take this test, you should be willing to spend the last five minutes before turning it in to make sure that there are no careless errors. Your final check should include the following steps.

1. Go back to any answers you meant to change and make sure you made that change on the answer sheet. Be sure to erase the original answer completely, especially if you have a machine-scorable answer sheet.

2. Spot-check your answer sheet to be sure you put down the answers you intended. If you left some answers blank the first time through, make sure that the following answers are where they belong and weren't marked in the answer row you had left blank for the time being. If your answers were hastily written, fix the ones that might be misinterpreted by the person correcting the test.

3. If there is no penalty for guessing, use the appropriate guessing strategy at the end of this chapter to fill in any blanks on the answer sheet. If there is a penalty for guessing, do not guess; instead, try to find the questions in the test. It is possible that you already worked out the answer but did not record it on the answer sheet.

4. Quickly check for stray marks and erase them, especially if you are using a machine-scorable answer sheet. Stray marks can be picked up by the test-scoring machine and counted as errors.

5. Erase any dots, checks, and underlining on the test (unless you were allowed to write your answers on the test). It is possible that other students will be using the same test, so you should turn it back in the same condition in which you received it. This is why your checks, dots, and underlining
should be written in pencil, very lightly.

6. Be sure your name and other necessary information is on every page of your test (if your answers are marked on the test) or answer sheet. If you used scratch paper to work out problems or to jot down formulas or other information from memory, put your name on that, too, and label it "scratch sheet." Gather all these test materials and turn them in.

Test-Question Cues

Although it is no substitute for thorough study, knowing how to find cues to the answers in objective questions is an important skill for the testwise student. Some cues can be found in all (or several) kinds of objective tests: inter-item cues, grammatical agreement, singulars and plurals, word association and synonyms, and qualifying and absolute words. Other cues (length, position, and generality of multiple-choice alternatives, for example) are specific to a particular kind of objective test and will be explained in the following sections about each of the four kinds of objective questions.

Cues are more often found in teacher-made than in standardized tests. The publishers of standardized tests have huge staffs of test experts and spend a great deal of time and money to avoid flaws in their tests. Teachers, however, may not be experts in making test questions and do not have unlimited time or assistance to develop their tests. Consequently, most of the cues described in this chapter apply only to teacher-made tests.

A word of caution before you start to learn about these cues: do not spend a disproportionate amount of time searching for them. Use your knowledge of the course material to answer the questions; look for cues only if you are uncertain about the right answer.

Inter-Item Cues

One question in a test may provide information about the answer to another; this is an inter-item cue. It is difficult for an instructor to write a long objective exam covering a limited number of topics without having information in some questions that relates to other questions.

When you are not sure of the correct answer to a question, mark it to come back to the second time through. You might find information in another questions that will give you the answer or at least help you eliminate one or more of the alternatives. As you work through a test, you may also find information that will give you a good reason to change a previous answer.

Inter-item cues are very important and very reliable. These are informational cues and can definitely help you get a better score. The other cues that will be discussed are probability cues, which can only increase your chances of answering a question correctly.
The following two questions are an example of an inter-item cue.

1. The orthograde skeletal structure of Homo sapiens is most similar to that of:
   A. beavers.
   B. apes.
   C. bears.
   D. deer.

37. An animal with an orthograde skeletal structure is said to:
   A. live in water.
   B. walk on two legs.
   C. walk on four legs.
   D. have no foreman magnum.

The first question tells you that Homo sapiens has an orthograde skeletal structure. Therefore, when you come to question 37, you can infer that B must be the correct answer. And, by selecting the correct answer to question 37, you could then infer that B was the correct answer to question 1 because the only one of the alternatives that walks on two legs is apes.

Inter-item cues can be used with matching questions to help you make matches you were uncertain of during the first go-through. They can also often tell you whether a statement is true or false. And they can often provide the answer to a completion question.

Qualifying and Absolute Words

An alternative or a statement that contains a qualifying word such as generally, often, some, or most, is more likely to be correct than one that contains an absolute word such as always, never, all or nobody. This is because there are very few things that are absolute, and it takes only one exception to make an absolute statement false or incorrect. For an example, compare the following two true-false questions.

1. All students know how to take tests. True or False
2. Some students know how to take tests. True or False

The word all in statement 1 makes it false because it is too inclusive. The word some in statement 2 makes it true; it acknowledges that there are some students who know how to take tests and some who do not.

In the boxes below there are absolute words that usually indicate a false statement or an incorrect alternative, and there are qualifying words that usually indicate a true statement or a correct alternative.

**ABSOLUTE WORDS**

<table>
<thead>
<tr>
<th>Always</th>
<th>Everything</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Everyone</td>
<td>Exactly</td>
</tr>
<tr>
<td>Necessarily</td>
<td>Only</td>
<td>Exclusively</td>
</tr>
<tr>
<td>Definitely</td>
<td>No</td>
<td>Cannot</td>
</tr>
<tr>
<td>Must</td>
<td>Without exception</td>
<td>No matter what</td>
</tr>
<tr>
<td>All</td>
<td>Everybody</td>
<td>Nobody</td>
</tr>
<tr>
<td>None</td>
<td>No one</td>
<td></td>
</tr>
</tbody>
</table>
impossible
every

QUALIFYING WORDS

generally
usually
some
frequently
seldom

may
maybe
most
on the average
rarely

sometimes
occasionally
often
perhaps
probably

Do not rely entirely on absolute and qualifying words to judge a statement or alternative, however. An experienced test-writer can make a false statement without using an absolute word. Or a theorem, law, or rule to which there is no exception at present can be presented with an absolute word and will be a true statement or correct alternative; for example, "E always equals mc 2."

Sometimes there is not an absolute or a qualifying word in a statement or alternative, but it is stated in such a specific or absolute way that it is implied that there are no exceptions. These statements should be handled in the same way as statements with absolute words in them: Unless there can never be an exception, they should be considered false or incorrect. The following multiple-choice question provides an example.

1. When taking an objective test, it is a good idea to:

A. never guess an answer.
B. generally guess if you don't know the answer.
C. cheat.
D. usually expect to do very poorly.

Alternative C does not contain an absolute word, but always is implied. Therefore, you would reject C, just as you would reject A, which contains the absolute word never. That narrows your choices to B and D and common sense (and having studied this book) would tell you that D is incorrect.

Grammatical Agreement

You can usually eliminate a choice if it does not grammatically agree with the stem of a multiple-choice or matching question or the sentence structure of a completion question. Sometimes the verb tenses or pronoun references do not agree. You may not be able to define the grammatical error, but you will know that somehow the choice does not sound right. Keep in mind, though, that typing errors can be made. If you feel fairly certain that an alternative is the right one even though it is not in grammatical agreement, pick it anyway.

Use of A and An. The article a is used with words that begin with consonants, and the article an is used with words that begin with vowels. Although a careful test-writer would put an article with each alternative instead of in the stem, you might occasionally encounter a question such as the following one.
1. A biologist who specializes in the study of the relationships of an organism to its environment is known as an:

A. ecologist.
B. structuralist.
C. taxonomist.
D. naturalist.

Since the stem ends with the article an, the correct alternative must be A-ecologist—the only one that begins with a vowel.

Singular and Plural Verbs and Nouns. Multiple-choice and completion questions both require you to complete a sentence. Your choice should make a grammatically correct sentence. So if the stem of a multiple-choice question uses a plural verb, the correct alternative will contain a plural noun or object; if the stem uses a singular verb, the alternative should also be singular. For example, if the alternatives to a stem that used are were (A) bone, (B) ear, (C) muscle, and (D) nerves, you would choose D, the only plural noun among the alternatives.

For a matching question, you can also use the singular-plural cue. A plural lead in Column 1 should match a plural alternative in Column 2, and a singular lead should match a singular alternative. For an example, look at the following matching question.

1. children
2. female
3. male
4. families
5. babies

A. infants
B. boy and girl
C. woman
D. man
E. mothers and their children

The only likely matches to 1, 4, and 5 are A, B, and E, since they are plural. Similarly, the only probable matches to 2 and 3 are C and D, the only singular choices. So even if you did not know the answers to this matching question, you could at least narrow down the choices by using the singular-plural cue.

Word Associations and Synonyms

In multiple-choice and matching questions, you may find that a word in the stem has a direct relationship to a word in one of the alternatives. The following multiple-choices question illustrates a synonym cue.

1. The Strong Vocational Interest Blank is used to measure:

A. aptitudes.
B. likes and dislikes.
C. achievement.
D. adjustment.

The word interest in the stem is synonymous with likes and dislikes, or alternative B. Of course, there will be questions in which the synonym is not the correct choice; if you recognize the correct answer, choose it rather than follow this cue.
Word-association cues are sometimes less obvious than synonyms, but you can find them by carefully reading the alternatives. The following multiple-choice question is an example of a word-association cue.

1. Charles Dickens' *Hard Times* is about the:
   A. difficult life of a factory worker
   B. politics of the French chateau country
   C. court of King Edward III.
   D. limitations of European existentialism.

Notice that the name of the book is *Hard Times*. The phrase "difficult life" in alternative A has about the same meaning. So even if you had not read the book, you could make an educated guess by using this cue.

ANSWERING MULTIPLE-CHOICE QUESTIONS

Your task is to read the stem, select the best possible alternative, and mark that answer on an answer sheet or the test itself. Selecting the best alternative is the hardest part of that task, but there are some techniques you can use to make it easier.

Anticipate the Answer

Multiple-choice tests often seem difficult because all the alternatives, or "foils," seem true. The instructions, however, usually tell the student to select the best alternative. That is why it is best to read the stem and then anticipate the answer before you read the alternatives. Once you have anticipated the answer, you can look for it among the alternatives offered.

Even though you may not anticipate the exact answer, it is probable that you will anticipate some major component of the answer. Therefore, as you read the alternatives, you can narrow the choices to those that contain that major component. One note of caution, however: Read and consider all the alternatives even if you first spot one that contains the major component you anticipated. It is possible that more than one alternative will contain the component, and you have to select the best one.

If the component you anticipated is not in any of the alternatives, focus on the choices offered and determine how well each of them answers the question. Select the one that makes the most sense in relation to the question.

Eliminate Unlikely Alternatives

The key to taking a multiple-choice test is the ability to eliminate answers, or narrow down the possibilities. This increases the odds that you will get the answer correct. Even if you are unsure of the material, by eliminating one or more of the alternatives, you increase your chances of selecting the correct alternative from those being offered.

To eliminate alternatives, you must apply your reasoning abilities. If you are asked to choose the correct theorem to be used for application to a geometry problem and you notice that one of the alternatives is not a theorem, then you would reason that the alternative should be eliminated.
When several alternatives seem correct, or if none of them do, you should compare them to see how they are alike or different. By balancing the alternatives against one another, you should be able to eliminate one or two based on what you know about the topic.

One way to eliminate alternatives is to treat each one as if it were a true-false statement. Lightly mark in pencil a T or an F by the alternative after you have read it with the stem.

Use Cues

In the preceding section, we have already looked at cues that are applicable to all or most kinds of objective questions: inter-item cues, qualifying and absolute words, grammatical agreement, and word association and synonyms. In addition, there are several cues that are specific to multiple-choice questions. These are cues that can be found in the alternatives.

The Most General Alternative. The correct alternative is often the most general, since the most general alternative often is the most encompassing of the choices. You will often find a list of items that have some very technical and specific alternatives and one that is more general. Chances are good that this is the correct answer. The following question is an example.

1. The lungs
   A. are solid and immobile and located within the chest.
   B. are the only organs that produce insulin.
   C. function primarily in respiration.
   D. possess the sphincter of Oddi.

Even if you aren't sure of the correct answer, you can see that the alternatives A, B, and D all deal with specific facts and details about the lungs. C deals with a main feature of the lungs—respiration. Since C is the more general answer and allows for more variability, it is logically the best one.

Two Similar Alternatives. If two alternatives have nearly the same meaning, then both are probably not correct—unless it is a key word or phrase that is different. For an example of a question that has two alternatives that mean essentially the same, read the following:

1. The Treaty of Brest Litovsk was ratified by Moscow because:
   A. Tsar Alexander I wanted to prevent Napoleon's invasion of Russia.
   B. Austria was outproducing Russia in armaments.
   C. Russia could not keep pace with the military production of its enemies.
   D. Lenin wanted to get the Soviet Union out of World War I.

Since alternatives B and C have very similar meanings, you should choose the answer from alternatives A or D. If two alternatives mean the same thing and only one correct answer is being asked for, you should eliminate the two similar answers.
Alternatives of Opposite Meaning. If two alternatives have the opposite meaning, one of them is probably the correct answer, because when the instructor is making alternatives for a question, an antonym for the correct answer is often the first thing that comes to mind. An example of a question with two alternatives of opposite meaning is the following:

1. The planarian has:
   A. an anterior brain.
   B. three legs.
   C. red eyes.
   D. a posterior brain.

   The alternatives A and D are opposites. You can eliminate B and C, unless you know one of them is the correct answer. Since the alternatives A and D have opposite meanings, one of them is probably the correct answer.

None or All-of-the-Above Alternatives. If one of the alternatives in a multiple-choice question is "none of the above" or "all of the above," the best approach is to read the stem and then, as you read each alternative, to decide if it is true or false. Lightly pencil a T or an F next to each alternative. When you come to the alternative that says "none of the above" or "all of the above," simply look back at what you decided about the alternatives above. If you indicated F by all of them, "none of the above" is probably the correct answer. And if you indicated T by all of them, the answer is probably "all of the above."

If you marked some T and some F, however, then eliminate "all of the above" or "none of the above" and pick your answer from the alternatives marked T. If you have four alternatives and one of them is "none of the above," two are marked F, and you are uncertain about the fourth one, your answer will either be "none of the above" or the fourth alternative.

A variation of the none or all-of-the-above alternative is one indicating that two out of three (or three out of four) alternatives are correct; for example, "B and C above." If you marked B and C with a T, then that alternative is correct. If you marked one T and one F, then "B and C above" is not correct and should be eliminated.

The Middle Value. When the alternatives are numerical values or a range (from old to new, early to late, small to big, for example) and you are not sure which one is correct, you can usually eliminate the extremes. For an example, look at the following multiple-choice question.

1. The mature human has how many teeth?
   A. 15    B. 32    C. 54    D. 7

   If you aren't sure of the answer, eliminate the two extreme values, C and D. Then choose one of the two middle values. (In this case, you could simple use the information available in your head—a count of your teeth would lead you to choose B!)

The Length of Alternatives. Many tests are fairly consistent about the length of correct answers. If you notice that most of the correct answers have been the shortest alternatives and you have no informational cues, pick the shortest of the possible alternatives. If most of the correct answers have been the longest, then pick the longest of
the alternatives that have not been eliminated.

If you haven't noticed a tendency for the correct answers to be the longest or the shortest, the best choice may be the longest alternative—if it is the most inclusive of the choices and does not contain or imply an absolute word.

The Position of Alternatives. Skim your answer sheet to see if most of the correct answers are in the same position. If there is a pattern and you have no other basis for selecting an alternative, then choose the answer in that position.

The alternative in the middle position, especially if it has the most words, is often the correct answer. Research has shown that in four-item multiple-choice questions, C is the answer slightly more often than the other alternatives. The position of alternatives is one of the weakest cues, however, since you don't know if your instructor has made a conscious effort to avoid the same position for the correct answers. This cue should be used only after you've searched for all other cues and if you have absolutely no idea of the correct answer.

Answering Matching Questions

Do not start answering a matching question until you have read the directions carefully. There may be more alternatives in Column 2 than there are stems in Column 1 and you will have alternatives left over. Or you may be asked to match more than one alternative with each stem. You may be directed to draw lines connecting the matches or you may have to write the letters identifying the alternatives beside their match in Column 1. If the directions are not clear, ask your instructor. Read through both columns to get a sense of what all the choices are. Consider all the alternatives even if you first spot one that you think is a good match; it is possible that more than one alternative could fit.

To work through a matching question, you should follow these steps:

1. On the first go-through, make all the matches you are sure of. Check off the alternatives in Column 2 as you use them (unless the directions tell you that each alternative can be used more than once). The key to answering matching questions is the same as that to answering multiple-choice questions: Eliminate as many possibilities as you can.

2. Leave the alternatives you are not sure of and work your way through the rest of the test.

3. Come back to the question when you discover an inter-item cue that will help you.

4. On your second go-through, come back to the unfinished matching questions and look for cues, including those of grammatical agreement and word association discussed earlier in this chapter and the cues that are specific to matching questions, which we will look at now.

Matching-Question Cues

There are two special kinds of cues to look for in matching questions to help you narrow your choices: a mixture of categories and the position of the alternatives in Column 2.
Mixture of Categories. In a matching question on a history test, for example, you might find names, dates, and events. In the first column, there may be stems of events and names to match with dates and events in the second column. Because it is not likely that you would match an event with an event and you would probably not match a date with a name, you can narrow your choices. The names in Column 1 should probably match events in Column 2 and the events in Column 1 should probably match dates in Column 2. Look at the example below and figure out the likely matches for the stems in Column 1.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Event</td>
<td>A. Date</td>
</tr>
<tr>
<td>2. Name</td>
<td>B. Event</td>
</tr>
<tr>
<td>3. Event</td>
<td>C. Date</td>
</tr>
<tr>
<td>4. Name</td>
<td>D. Event</td>
</tr>
<tr>
<td>5. Event</td>
<td>E. Date</td>
</tr>
<tr>
<td>6. Name</td>
<td>F. Event</td>
</tr>
<tr>
<td>7. Event</td>
<td>G. Date</td>
</tr>
<tr>
<td>8. Name</td>
<td>H. Event</td>
</tr>
<tr>
<td>9. Event</td>
<td>I. Date</td>
</tr>
<tr>
<td>10. Name</td>
<td>J. Event</td>
</tr>
</tbody>
</table>

Instead of having ten possible matches for each stem, you have only five. While five possible answers are still a lot, the probability of guessing correctly has increased and your knowledge of the course material should help you narrow down that five even further. For stems 1,3,5,7, and 9 in Column 1, you would select a match from alternatives A,C,E,G, and I in Column 2. For stems 2,4,6,8, and 10, you would consider alternatives B,D,F,H, and J.

Positive Cues. If you cannot decide between two or three matches, one cue that will increase the probability of selecting the best match is the position of the alternatives. It is likely that your instructor has tried not to put the matching alternative in Column 2 directly across from its stem in Column 1. So if one of the possible matches is across from the stem, you should probably assume that it is not the correct one.

Sometimes, the instructor will decide at the last minute to add one or two extra alternatives to Column 2 to make the question more challenging. Often these extras will be at the bottom of the column because the instructor doesn't have time to retype the entire question. Since you don't know whether your instructor was in a hurry to make the test, this is not a completely reliable cue. You should use it only after you have made all the matches you can based on your knowledge of the material and eliminated all the possible alternatives using the other kinds of cues. If you are left with an alternative in the middle of the list and one at the very bottom, go with the middle alternative.
The following matching question illustrates how to use position cues.

**Directions:** Write the letter of the correct answer from Column 2 in the answer blank next to Column 1. Use each answer only once.

<table>
<thead>
<tr>
<th>Answers</th>
<th>Column 1</th>
<th>Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1. anthropologist ✓A. community and family life</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2. astronomer ✓B. meanings and psychological effects of words</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. geologist</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>4. biologist ✓C. human development</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>5. botanist ✓D. celestial phenomena</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>6. zoologist E. language</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. entomologist F. insect forms</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>8. philologist G. the earth</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>9. semanticist ✓H. all forms of living matter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. sociologist ✓I. animal life ✓J. plant life</td>
<td></td>
</tr>
<tr>
<td></td>
<td>K. problems of aging L. mental disease</td>
<td></td>
</tr>
</tbody>
</table>

You have used your knowledge and other cues to make the matches shown in the answer column, and you have checked off the alternatives in Column 2 that you have matched. But you have no idea of the answers to stems 3, 7, and 8, and you have five alternatives left in Column 2. By using the same-line position cue, you can probably eliminate G as a match for 7.

By using the end-of-the-column position cue, you can probably eliminate K and L entirely. Therefore, the answer to 7 is most likely E or F. If you picked F (which is the correct match), you would be left with alternatives E and G to match with stems 3 and 8. You can use your knowledge and reasoning ability to choose, or, if that isn't any help, you can simply guess (and you would have a 50-50 chance of being correct). If you guessed correctly, you would have put G next to 3 and E next to 8.

**Answering True-False Questions**

True-false questions test not only your knowledge of the material but also your ability to do careful and critical reading. You must pay attention to every word in a true-false statement, but you must guard against reading information into it that isn't there and against trying too hard to find exceptions to every statement. To illustrate the problem with overinterpreting, read the following statement.
1. Psychology is the science that studies why human beings behave as they do. True or False?

You might be tempted to say that this statement is false because you remember from your notes that psychology also studies animal behavior. The testwise student realizes, however, that just because this statement does not contain an exhaustive definition of psychology, it should not be judged false. If the statement had been worded "Psychology studies only human behavior," however, then you would have marked it false; the only incorrectly limits the statement.

The hardest kind of true-false question is the mixed statement; in other words, one part is true and the other part is false. You need to remember that unless the entire statement is true, you should mark it false. A true-false test can also be made more challenging by asking you to underline the elements that make statements false or to revise false statements to make them true ones. Be sure to read the test directions carefully.

When answering a series of true-false questions, don't get bogged down on any one of them. Keep up your speed, allotting only the length of time you scheduled for each question in the first go-through. As you continue through the test, look for inter-item cues. When you come back to the questions you couldn't answer, use the cues of qualifying and absolute words discussed earlier in this chapter as well.

Unlike multiple-choice tests, the pattern of answers is irrelevant in true-false tests. It does not matter if you have a long series of trues or of falses or if you have many more trues than falses or vice versa. The pattern of answers is not a cue in true-false tests.

Answering Completion Questions

Completion, or fill-in-the-blank, questions are the most difficult kind of objective questions because you must recall the right answer rather than recognize it among a number of alternatives. As with the other kinds of objective questions, however, it is important to read the directions and the questions very carefully.

Some of the cues that apply to the other objective questions will be useful in helping you answer completion questions, too. Look for cues of grammatical agreement. Is the word before the blank a or an? That can tell you whether the missing word starts with a vowel or a consonant. Are the verbs, nouns, or pronouns that refer to the missing word singular or plural?

When you think of an answer to fill in, read the completed sentence quietly to yourself. Does it sound right? Sometimes hearing the sentence will help you decide if you've made the right choice and stimulate your memory.

Of course, inter-item cues are the most helpful. As with the other kinds of objective tests, skip the questions you're not sure of the first time through. After going through the rest of the test, you may discover the answer in another question.

The length of the line to be filled in can sometimes be a cue but it is not very reliable. Someone besides your instructor may have typed the test and not have known what the intended answers were. Or your instructor might have made all the blanks uniform to avoid this kind of cue or simple have made blanks that fit the available space.
Be aware that the answer may be more than one word; it could be a phrase or a sentence. If the directions do not tell you, you should ask the instructor before you start the test.

Sometimes you may not be sure that you have recalled the exact word the instructor is looking for. If that is the case, go ahead and write down the word or phrase that comes to mind because the instructor might give you partial credit for having the general idea.

**When and How to Guess**

When you've come to the limits of your knowledge and you've just about run out of time, your last resort for some tests is to guess. But first, you need to know whether there will be a penalty for guessing; if this is not indicated in the test directions, ask your instructor before you even start to take the test (asking in the last three minutes of the test would be a dead giveaway!)

On most teacher-made tests, departmental tests, and many standardized tests, there is no penalty for guessing. This means that your score will be based only on the number of correct answers; incorrect answers will not be subtracted from your score. In this case, you would want to answer every item on the test whether you knew the answer or not.

On some standardized tests, there is a penalty for guessing. This usually means that one point (or however many points the question is worth) is subtracted for each unanswered question, but a fraction more than the value of the question is subtracted for each incorrect answer. The purpose of this penalty is to discourage students from wild guessing.

The amount of the penalty should determine how much to guess. If the penalty is only one-fourth more than the value of the question, for example, and you can eliminate (by your knowledge or by cues in the test) at least one of the alternatives, you should go ahead and guess. If the penalty is greater—say, one and a half times the value of the question—you should guess only if you have narrowed the possible alternatives to two.

If your time is almost up and you have not answered 15 or 20 percent of the questions on the test (which can easily happen on a standardized or very long test), you should use the last minute to do some wild guessing and answer every question if there is no penalty for guessing. Since you might not want the person scoring the test to know that you were guessing, you shouldn't put all your wild guesses in the same column; rather, mark a random variety of answer positions.

Try the guessing experiments that follow to see how many points you could pick up by randomly guessing on a true-false test and on a four-alternative multiple-choice test. Compare your random answers to those in the back of the book. Give yourself two points for each question you answered correctly; if you answer all of them correctly, your score would be 100 points for each test.
TAKEING AN ESSAY TEST *

Because essay questions require recall memory rather than just recognition, instructors use them to evaluate how thoroughly you have mastered course material. Consequently, essay questions require more from you. They require not only very thorough study but also the ability to provide answers that are complete, well organized, clear, and neat.

The form of your essays is also important because essay tests are graded more subjectively than objective tests; there is not just one simple way to answer each question. Although most instructors have an answer key that lists the concepts and facts they think the ideal answers should contain, your grade depends on your ability to communicate those concepts and facts to your instructor. Incomplete essays, ones that weave back and forth from point to point, ones that don't directly answer the question, or ones that are hard to read give the instructor the impression that the student doesn't know the material.

If you've studies according to the procedure described in Chapters 3 and 4, you should know the material thoroughly. In this chapter, you will learn how to communicate that knowledge on an essay test. Your goal is to answer all the questions as thoroughly, clearly, and concisely as possible. To do that, you need to budget your time; your essay needs to answer specifically the question that is asked; and your answer should be written neatly and in an organized manner.

Budget Your Time

After you have gotten the test and unloaded the facts from your memory, quickly look over the exam to see how many questions you will have to answer and how many points each is worth. For example, you may be asked to answer two out of three or one out of two from each section or three out of five from the entire test. You should note whether the questions in one section are worth more than the questions in another. If the test does not indicate the point value of the questions, immediately ask your instructor.

As you read through the test, you will notice that certain questions seem like they will be easier for you to answer than others. Choose the questions now that you will answer. As you read, concepts and facts to include in your answer may occur to you, so note them as you go through the test. These should be one- or two-word notes to jog your memory when you come back to write out the answers; don't try to compose the answer now.

After you have assessed how many questions you have to answer and how much each is worth, plan a schedule. You will want to allow time to read each question carefully, to outline the answers, and to make a final check for careless omissions and errors.

As an example, let's look at how you would budget your time to take an essay test in 55 minutes that has three equally weighted questions. You know you'll want at least 5 minutes to assess the test, choose your questions, and make your schedule. You know you'll want to spend the last 4 or 5 minutes of the test period doing a final check. And you want to allow yourself about 10 minutes before that to reread your answers and make sure they are complete or to finish any answer that still needs some work. Those three steps will use up 19 or 20 minutes, leaving you with 35 or 36 minutes to answer the questions. So, since you have three equally weighted questions, you should spend 12 minutes on each question - 2 or 3 minutes on an outline and the remaining 9 or 10 minutes writing out the answer. If you made a diagram of your test-taking schedule, it would look something like this.

10:00 - 10:05 5 minutes to assess, schedule
10:06 - 10:51 36 minutes to answer questions
             (12 minutes on each - 2 or 3 for outline,
              9 or 10 for answer)
             10 minutes to reread, finish
10:51 - 10:55 4 minutes to do final check

Sometimes the questions will not be equally weighted, however. If this is the case, you should adjust your schedule so you can spend more time on the question or questions that are worth more points. For example, if you had to answer three questions and one was worth twice as much as each of the other two, you should spend twice as much time on that question. Using the example above, you would spend 18 minutes to answer a more valuable question and 9 minutes each for the other two.

Read the Question Carefully

Your answer must fit the question. If the instructor asks you to analyze an event, a simple description of it will not do. If you are asked to interpret a poem, you should not just summarize it.

In Chapter 4, you learned that your notes can help you predict the kinds of essay questions you're likely to face: short-answer questions or long-answer trace, compare-and-contrast, or discussion questions. In this section, you'll learn some of the "exam words" that are used to signal those different types of questions and the appropriate kind of essay answer to write for each of them. First, you should read carefully through the words and their answer descriptions in the box "Essay Exam Terms."
ESSAY EXAM TERMS

Short-Answer Terms

Classify. Group the information in a diagram, chart, or description according to its main parts or characteristics.

Define. Give concise, clear, and authoritative meaning. Don't give details, but make sure you have given a complete definition. Show how the thing you are defining differs from things in other classifications, if necessary.

Diagram. Make a drawing, chart, plan, or other graphic answer. Label the information in it. It is a good idea to add a brief explanation or description.

Enumerate. Write in a list or in an outline form. Give points concisely and one-by-one.

Give an Example. Cite one instance or one situation to support or exemplify the general point.

Illustrate. Use a picture, diagram, or concrete example to explain or clarify.

List. Write an itemized series of concise statements giving names, things, or points one-by-one.

Name. Make a list of all the important names or components.

State. Present the main points in a brief, clear sequence, usually omitting details, illustrations, or examples.

Summarize. Give the main points or facts in a condensed form, omitting small details and examples.

Long-Answer Trace Terms

Describe. Recount or relate in sequence the steps requested. (Note: This can also be a short-answer signal if you are asked to describe a single thing rather than a sequence; then you would characterize or sketch the thing in expository form.)

Outline. Organize a description under main points and subordinate points, stressing the process or relationship among events. (Note: This can also be a short-answer signal if it is a single thing rather than a sequence to be outlined; in that case, omit minor details and use the outline to describe or classify.)

Trace. In narrative form, describe the process, development, steps, or historical events.
Long-Answer Compare-and-Contrast Terms

Compare. Emphasize the similarities between two (or more) things and, in some cases, also mention the differences.

Contrast. Stress the differences between objects, ideas, qualities, characteristics, events, or concepts.

Relate. Show how things are connected to each other or how one thing causes another, correlates with another, or is similar to another.

Long-Answer Discussion Terms

Analyze. Carefully appraise the situation or problem, citing both advantages and limitations. Emphasize your personal evaluation in light of the appraisal of authorities you have notes.

Criticize. Express your judgement about the merit or truth of the factors, concepts, or views mentioned. Give the results of your analysis of them, discussing their strong points and limitations.

Defend. Present one side of an argument, issue, or situation. If you can, cite the view of authorities or some data to support your side.

Discuss. Examine, analyze carefully, and give the reasons and all relevant details about a specific situation, individual, or institution. Be as complete and detailed as possible.

Evaluate. Carefully appraise the problem or situation, citing both advantages and limitations. Emphasize the appraisal of authorities and, to a lesser degree, your personal appraisal.

Explain. Interpret, clarify, and carefully spell out the material you present. Give reasons for differences of opinion or of results. Try to analyze the causes of the differences.

Interpret. Translate, give examples of, solve, or comment on a subject. Give your judgement about it in light of all you know about it.

Justify. Prove or give reasons for decisions or conclusions. Try hard to be convincing. Cite authorities or data to support your position.

Prove. Establish that something is true by citing factual evidence or giving a clear, logical reason.

Review. Examine a subject critically, analyzing and commenting on the important information about it.

As you write your answer, qualify specifics if you are not sure you remember them correctly. For example, it is better to say "toward the end of the eighteenth century" than "in 1793" if you're not sure if it was 1793 or 1783. Avoid definite numbers and dates that you're not completely sure of. Often, an approximation is all that is necessary.
After you have finished writing out your essay, leave sufficient space in case you decide to add some essential information that you discover you omitted.

Neatness

Your instructor will be favorably impressed by legible handwriting, ample margins, and separation of paragraphs by indentations. Research has shown that these elements of neatness are important variables in scores. So when you write your answer, keep the following points in mind.

1. Write your words so that they can be read by others. If your handwriting is hard to read, you might print your answer.

2. Try to use correct spelling, punctuation, and grammar. Your instructor will be more impressed with your answer if you have used traditional spelling and grammar, and if your thoughts are clearly separated by appropriate punctuation.

3. When you start a new idea or a new paragraph, indent to separate it from the previous paragraph. This is a way to show your instructor how many ideas or examples you have been able to recall and discuss.

4. Leave sufficient margins along all four sides of the page. This makes the answer look neater. It also allows room for you to insert additional information that you realize at the last minute that you had left out.

5. Erase or cross out carefully. Don't leave your paper smudged and torn up from erasing. And don't make your instructor wonder what is and is not part of your answer. Also, make your changes and insertions clear and easy to follow.

Reread Your Answers

Once you have completed the essays for each question, reread each one. When writing in haste, it is easy to misspell words, to write illegibly, to miswrite dates and figures, and to omit words (or parts of words) and even parts of answers. As you go back over your essays, watch for these common errors. Also, check to see that you have used all the memorized facts that you could. If you need to add anything lengthy, use the space you left after your answer and draw an arrow from the additional information to the part of the answer to which it refers. These last-minute corrections and additions may add appreciably to your grade and generally improve the impression your paper will make on your instructor. Be sure to make them as neat as possible.

Make a Final Check

In the last few minutes before the testing session ends, make a final check. Be sure your name and any other necessary information (date, class name, section number) is on every page of your answers. Then gather your answers together and check the order of the pages. When you turn your test in, ask the instructor if you also need to turn in your scratch papers containing the outlines and the jotted-down facts. If so, indicate at the top of each page that they are "scratch sheets."
Chapter Summary

To take an essay test, you need to budget your time after assessing the number of questions and choosing the ones that seem the easier for you to answer. You'll need to allow time to read the questions carefully, paying attention to the essay test terms and the subjects of the questions. Then, if the question calls for a long-answer essay, outline your answer so it will include all the important points from your study notes and the list of memorized facts you jotted down just before starting on the test.

When you write your answer from the outline, keep the following pattern in mind.

1. Write an opening statement that rephrases the question.
2. Develop the main points of your outline one paragraph at a time.
3. Follow the topic sentence (main point) of each paragraph with two to four details, examples, or supportive citations.
4. Write a one- or two-sentence summary.
5. Leave room between each answer in case you decide to add more after rereading it.

Finally, try to give yourself enough time to reread your answers and to make a final check and if you run out of time before writing one of the essays, hand in your outline.
MULTIPLE-CHOICE TEST STRATEGIES *

Multiple-choice is the most popular kind of standardized test. It's popular with professors, because the answers are easy for teaching assistants to grade. And it's the type of exam that rewards testwise students with the most extra points for their testwiseness.

We have arranged the strategies for answering multiple-choice questions in the order in which you should use them during an exam. In other words, if strategies 1 through 3 supply the answers, don't even bother to use strategies 4 through 9.

Strategy 1: Work Quickly

Studies have show that students who rapid-fire their way through multiple-choice tests—even if they pick some answers at random—get better scores than students who may know the material better but are slow at taking tests.

Read each question through just once. Don't dawdle about putting down the right answer the instant you come to it. If you have second thoughts about the answer, don't stop to think about it right then; jot down a little mark alongside the number. Then, if you have time at the end of the test, you can go back and think over your first answer.

If an answer seems obvious, have confidence in yourself. Choose that simple answer. Don't waste time looking for hidden qualifications and tricks.

Strategy 2: Give the Answer the Teacher Wants

Sloppy reading and intellectual heroics can cost you test points. Learn to read-and to understand-test instructions as well as questions. Then follow them.

Tactic 1: Make sure you understand precisely what the directions tell you to do.

Some tests, especially teacher-prepared versions, ask for the most correct answer. In that case, you may have to figure out more than just the answer; you may have to figure out what the test preparer's biases are. Remember, it's not what seems most correct to you that counts, but what the teacher believes is most correct. This is not the time to stand staunchly by your own opinions.

Some teacher-made tests allow for more than one correct answer. If you're supposed to mark all the right ones, be sure to do it.

Be careful on tests that include "all of the above" or "none of the above" choices. Don't select a choice like that unless it applies totally. For example, if the first two choices are right, the third choice is definitely wrong, and the fourth choice is "all of the above," don't check off number 4. Choose between number 1 and number 2.

Tactic 2: Study the "given" part of each question

Read quickly, but read every word that counts. (If you're not good at this, practice. Race against the clock using the practice test books listed in Appendix A. This is a skill that can be learned. Learn it.)

If the "given" section of a question (test-designers call it the stem) includes several complicated statements, isolate each of them. Make sure you understand each individual part. When you have picked an answer, check it against each segment. Your answer has to satisfy every part of the question. Several studies have shown that this knack of breaking down complicated questions into several smaller ones rewards testwise students with extra points on almost every exam.

Strategy 3: Guess Before You Choose

Figure out your answer before you look at the possible choices. If it's among the choices, you'll save a lot of time. If it isn't, forget it and start studying each of the choices. At least you will have activated the part of your memory that applies to the topic, and that can help you recognize the answer your test-maker is seeking.

Strategy 4: Choose the Closest Answer

Most multiple-choice tests look for the quick, easy response. By their very nature, they are simplistic. So choose the closest answer even if you think it isn't 100 percent correct.

If a test is well constructed, all the answers will seem somewhat plausible. In that case, there will probably be at least one clue word in the stem that makes one answer definitely better than all the rest. Go back and reread the stem, looking for that clue word.

Some test-makers set traps for the unwary. They may put a plausible but incorrect choice first, then surround the one correct answer with some implausible choices. So don't grab at answer (a) until you have read (b), (c), and (d) as well.

Strategy 5: Eliminate Implausible Answers

The greater the number of ridiculous choices you can discard, the better your odds are of choosing the correct answer.

- Some answers are obviously wrong. Move quickly to the next possibility.

- Many answers are partly wrong. If they are wrong in any significant way, they're not the right choice unless the question was badly written. In that case, take it up with your instructor after the exam but before grades are given out.

- Many answers are correct statements by themselves. But they have nothing to do with the stem part of the question. Don't get trapped into choosing one of these.

- Sometimes two answers say exactly the opposite thing. In such a case, the correct answer is usually one or the other of the pair. (But if your teacher is a trickster, be wary!)
- Many times, two of the answers are similar. Often only one or two words are different. Again, the correct answer is usually one of the pair. Decide how the two answers are different and how these differences make one correct and the other incorrect.

**Strategy 6: Look for Clue Words or Numbers**

You can't always figure out correct answers by looking for clue words. In fact, some clever test-makers deliberately insert phony clues to throw the unwary student off the track. But if you have exhausted the first five strategies, then give this one a try. Looking for clues may point you to an answer that you suddenly remember as the correct one.

**Tactic 1: Watch for absolutes and qualifiers**

Answers that include always, never, all, and none are often incorrect. Few things in life are always true or always false. Test-designers who try to avoid quarrels over the answers like to slip in qualifiers such as seldom, generally, and tend to be.

Here's an actual exam question that could have been figured out using this method:

All of the following theories about the state of the dead are represented in the *Odyssey* except:

1. The dead may be changed into minor gods and thus achieve immortality.
2. The fortunate dead go to fields of eternal summer.
3. The spirits of the dead are taken to the Underworld.
4. Death is simply the end, with no survival in any form.

Got it all figured out already? No? Well, in number 1 the tester says, "The dead may be changed..." Number 2 says, "The fortunate dead go..." In number 3 you won't find such easy clue words, but anyone who knows anything about Greek mythology recognizes the statement as being true. Notice that in number 4 the clue words give it all away:..."no survival in any form." That's right. The correct answer is number 4. Even if you had never opened the *Odyssey*, if you used Strategy 6 you could get the correct answer!

**Tactic 2: Look for grammatical clues**

As we mentioned in the previous chapter, there's a tendency among test-makers to have the correct answer agree grammatically with the stem; they seldom take such care with incorrect responses. But beware: this is also a favorite trick of testers who like to throw testwise students off the track.
Tactic 3: Look for familiar phrases

In teacher-prepared tests, stems and correct responses are often taken right out of textbook or lecture notes. So if you recognize particular words or phrases or if the stem and one answer just naturally flow smoothly together in your mind follow your hunch.

Tactic 4: Look for degrees of correctness

If the answer is a number, at least one choice is likely to be too large and one too small. If time is involved, one date is likely to be too early, one too late.

However, if one possibly correct choice is very specific, and another possibly correct choice is very general, the general one may be the one you want. This is especially true if the general choice incorporates all or most of the information in the specific choice.

None of these clues is foolproof, of course. But they are a lot more dependable than wild guessing.

Strategy 7: Guess

On four-part multiple-choice tests, random guessing on all of the questions would give you an average grade of 25 percent. But you rarely need to guess randomly. On most multiple-choice tests, you should quickly be able to rule out two of the four possible answers by using what you do know plus the strategies we have already presented in this section. That alone can result in an average grade of 75 percent achieved by guessing alone. If you also use a bit of intelligence, you can push the guess rate beyond 80 percent.

We know someone who got stuck in a required ROTC course. Staunchly, he refused to read the textbook. On the other hand, he didn't want to flunk the course; he would just have had to take it over. He noticed that all the exam questions were four-part multiple choices and that two parts were always ridiculous. So he flipped a coin on the remaining choices and ended up with exactly 75 for his grade. We don't recommend this, but it shows how well the method works.

If you draw a total blank on the test's information, you still may be able to slant the odds in your favor. Watch for patterns in the answers. Some large-scale hand-corrected tests actually use definite answer patterns to simplify scoring. So, if all else fails, if answer (c) hasn't been chosen on your answer sheet for a long time, fill in (e). Unless you're penalized for wrong answers, any answer is better than no answer.

Strategy 8: Do Change Answers

A popular old wives' tale says, "Never change an answer." Don't follow this adage. Research shows that when you have a hunch that you ought to change an answer, your hunch usually proves to be right. But follow your hunches systematically.

- Don't go over answers until you have finished the test. Then use all the time you have.

- First, go back and reread the direction. Make sure you've followed them to the letter.
- Next make sure you have put all your answers in the correct places. You'd be shocked at how many students lose lots of points for not checking this.

- Next check over the questions and answers that you flagged for further thought.

- Finally, if you still have time, go over all your other answers.

If you believe that you ought to change an answer, change it. Sometimes just answering all the questions will give you clues-consciously or unconsciously. Also, by the end of the test you should have a better understanding of the test-maker's point of view; maybe you can figure out what he or she was driving at in a poorly worded question.

Don't keep changing answers back and forth. Repeated changes of the same answer rarely pay off; they just waste time.

Before you hand in your paper, be sure to erase all marks that don't belong on it.

Strategy 9: Never Give Up!

Researchers tell us that many students lose points because they give up before they've worked their way through the eight strategies above. Testwise students keep moving along, rapid-fire, ticking off each question in mum-watching for the words that count, looking for tricks, guessing at probable answers as they read the stem, searching quickly among the choices for the answer they prefer, systematically eliminating unlikely answers so that they can make an educated guess from the others. They make a stab at each question and move on. They know that the odds are in their favor if they just keep going.
HOW TO DO YOUR BEST ON ANY KIND OF TEST *

Testwise students use most of the following general test-taking strategies without thinking. With a bit of thinking, you can make them part of your bag of test tricks.

Strategy 1: Get The Most Credit In The Least Time

Time isn't always a problem in taking tests. But you should find out at the beginning whether or not it might be. If it is, then you need a plan to make the best use of your time.

Tactic 1: Decide whether to speed or not to speed

Take a minute to skim the test. Decide whether it's a speed test or an accuracy test. Most standardized tests are speed tests; only the very few top performers are expected to be able to finish the test. On the other hand, most course tests are accuracy tests; the tester expects that everyone who is a C student or above will be able to finish the test without rushing.

Tactic 2: Budget your time

Right at the beginning, allocate your time. And stick to your allocations! Standardized tests often do this for you by giving you fifteen or twenty minutes for each section, after which you're supposed to go on to the next section. You will actually answer the most questions, and get a higher score if you follow those instructions. Since speed-test preparers don't expect most people to get to every question, don't be thrown if you don't complete each section.

For course tests, divide up your time according to how many points each item is worth. For example, if one question or one section is worth 50 percent of your score, plan to spend half your time on it. (Of course, if you don't use the entire time allotted for any particular question, move on to the next one right away.)

Tactic 3: Take the easy questions first

If you don't have to answer questions in order, and there are relatively few questions on the test, pick out the easy ones. Get them out of the way first. This will calm your anxiety and, at the same time, get your memory working smoothly. But don't waste time trying to sort out the difficult questions from the easy ones; allow yourself no more than a few minutes.

Tactic 4: Read all the essay questions in advance

On essay tests in which you can choose, say, three out of five questions, read all the choices first. Then make your selection based on which ones you can answer best within the allotted time. If you have to choose four, for example, but only know answers for three of them, go ahead and write those three. Then review the remaining possibilities. Writing the three essays may have triggered enough of your memory to allow you to do a good job on one other topic.

Tactic 5: Leave the time-wasters for last

If you seem to be taking too much time on one particular question, stop working on it. Mark it so that you'll be able to find it easily after you've tackled the other questions. Then move on. If you have time left over at the end of the test, you can go back to the marked questions; by that time another question or answer may have sparked your memory on the earlier problem. If you don't have leftover time, you will have scored more points for correctly answering twelve questions that came easily to you than only nine that you sweated over.

Avoid skipping too many questions, because rereading them will also waste time. We suggest that you try not to skip more than one out of every ten questions.

Tactic 6: Check your watch

Look at your watch at sensible intervals to make sure you aren't falling behind. One workable plan is to check the time after every test section, another to look after every quarter of the test is finished. If you know from past tests that you tend to be slow, start by checking the time more frequently; that can help you develop a quicker rhythm. But don't let worry about time distract you from concentrating on the answers.

Tactic 7: Use all the time

Students who walk out of the test room early are often cheating themselves out of time they could use to good advantage. Reread the questions as well as your answers. Check for accuracy, legible writing, and questions you may have missed. Erase stray marks on machine-scored tests. On standardized tests, even if the directions say otherwise, testwise students often go back to earlier sections.

Strategy 2: Give Them What They Ask For

A University of Chicago study showed that one thing most clearly separates testwise students from the rest: how accurately they read the directions and the questions. It's not that the testwise students are better readers; they just know what to look for. Here's how you too can understand what the directions and questions really ask for.

Tactic 1: Read critically

Read all directions and all questions as slowly and carefully as necessary. Don't jump to the conclusion that they're the same old instructions or questions you've seen in class or on earlier tests. Be especially alert for words that may slightly change what is being asked this time from what you have seen before. Watch for punctuation that can change the meaning of phrases in the instructions. Be sure you don't read "and" where the instructions say "or," or read "have to" where instructions say "may." Be careful not to read your own meanings into questions or instructions.

Tactic 2: Flag tricky directions

In some of the test instructions look tricky, circle or underline their key words. For example, if the directions say "blacken in the correct square" and you circle the words blacken in, you won't turn in a paper that is answered with check marks. On machine-scored tests, blacked-in spaces always register; with checks, you can never be sure that
If your test includes an answer booklet or work paper, actually jot down important instructions such as "answer three essay questions out of five," "show all calculations," "two from Part A, one from Part B," and "copy the question." If the directions are complicated, number each step you have to take. Then remember to look back occasionally at the key phrases and steps. (On the other hand, don't keep rereading questions or directions needlessly; if your underlines or clue words are adequate, you can check yourself in just a few seconds.)

Tactic 3: Flag complicated questions

If questions are complicated, break them down into manageable parts. Number each part so you can check quickly to be sure that you have answered all the parts.

Tactic 4: Use all the help you can get

If directions say that you can use aids such as calculator, scrap paper, or even textbooks, don't play hero. Use them. You can be sure that testwise people are using them.

Tactic 5: Don't skip sample questions and answers

If sample questions and answers are given, as they often are in standardized tests, work them through. They will tell you whether the tester expects you to answer the questions with obvious answers or with thoughtful ones. They will also demonstrate how you're expected to mark your answers.

Strategy 3: Watch Out For Careless Errors

It's disheartening to work out a problem just right and get no credit for it because of some silly mistake you made in writing down the answer. Here's a quick checklist to use during every exam.

Tactic 1: Double-check when the pressure is off

Save time at the end of the exam to look for careless errors. Under tension, we all make slips. At the end of the test, when the pressure's off, we can usually find most of them.

- Reread questions to make sure that you read them accurately.
- Reread answers to make sure that you wrote what you meant to write.
- Be sure that all your numbers are legible.
- Double-check your calculations, using an alternate calculating method if possible.

Tactic 2: Fill in the right blanks

Make sure that you have put your name on the test-on all separate parts of the test. And be sure that you have placed all the answers in the proper spots. This is especially important to check when questions are on one sheet and answers on another.
Tactic 3: On essays, don’t waste space

Don't skip lines, or cover only one side of a page (unless so directed), or use ornate handwriting on essays. First of all, you just might run out of space. Getting another test booklet takes up valuable time. Besides, test-graders might look on space-wasting as your way of trying to cover up for not knowing the material—and that can cost you points.

Strategy 4: Try To Reason Out Answers To Tough Questions

Testwise students know that there's a large gray area between knowing and not knowing an answer. They don't give up if they're stumped at first; they try to reason through the question systematically. Here's how you can do the same.

Tactic 1: Look for clues in the question

Don't ever assume that you can’t answer a question simply because the contents seem unfamiliar at first. Try to substitute more concrete words or numbers for abstract ones. For example, if you encounter the term production isoquant on an exam and draw a blank, notice how isoquant divides into two possible stem words. Quant generally has something to do with quantity, doesn't it? Now, what about iso? Isotherms on a weather map are lines connecting points of equal temperatures. Isoceles triangles have two equal sides. So isoquant might mean equal quantities. See if this definition helps you answer the test question.

Tactic 2: Look for clues in the answer choices

When several answer choices are given, you can often reason out which answer is best. (In Chapter 5, on multiple-choice test strategies, we discuss this reasoning tactic in great detail.)

Tactic 3: Keep your eyes open for memory joggers

If one question stumps you, keep it filed away in the back of your mind as you go through the rest of the exam. Very often a question or answer that you haven't reached yet will trigger your memory on the earlier question. If you encounter enough related questions, maybe you can figure out in which chapter or lecture the stumper was given, and that can jog your memory.

Tactic 4: Save tough questions for last

Sometimes you don't need clever clues to figure out answers to questions that stumped you the first time through. Very often, it was tension that made your mind go blank; the relaxation that comes from getting through the entire test can frequently resurrect the right answer for you.

Tactic 5: If all else fails, guess

Except on exams that deduct a lot of points for incorrect answers, smart test-takers make educated guesses until they have filled in all the blanks. As a general rule:

- guessing always pays off when no points are deducted for it;
- guessing nearly always pays off in a course test for which you have studied, because when you have studied, you will rarely encounter a question about which you know absolutely nothing.

- guessing definitely pays off, even if points are subtracted for wrong answers, when you're given choices from which to select your answers.

How can you tell whether points are deducted for guesses? If the test directions tell you to answer all the questions, you can assume there will be no penalty for guessing. On standardized and other tests that give you a score sheet to work on, see if there is a space for the grader to list the number of wrong answers. If so, you should limit guessing to the questions for which the odds seem to be in your favor. (In later chapters we'll talk about how to make educated guesses on specific kinds of tests.)

**Strategy 5: Get Special Clues From Standardized Tests**

Standardized tests are generally designed in standard ways. Testwise students learn how they are designed and use that information to get better scores. They all apply the following tactics.

**Tactic 1: Remember that questions proceed from easy to difficult**

Questions within particular sections usually progress in difficulty. So if you meet a difficult question at the beginning, you're probably reading too much into it or missing something obvious. On the other hand, if an easy question seems to be near the end, you're probably missing a subtlety or falling for a trick; reread the question more carefully.

**Tactic 2: Fill in all the blanks**

Standardized tests are usually time tests. (See Strategy 1 in chapter 1.) That means that very few people will finish all the questions. If you deliberately save a bit of time for the end of the test, you can go back and fill in all the blanks quickly. Since an unanswered answer is sure to be wrong, any answer can only help you get a better score.

**Tactic 3: Remember the odds**

Even on tests that subtract quarter-points for wrong answers, with educated guessing you may be able to play the odds and come out ahead. For example, many tests with four-part multiple-choice questions have two choices that are usually obviously wrong; even a flip of the coin on the remaining two choices results in the right answer two out of four times. And if you let your instincts and other clues help pick out the right choice among the two possibilities, the percentages climb way above three out of four.

**Strategy 6: Get Special Clues From Instructor-Prepared Tests**

Instructors who prepare tests generally have distinctive styles and particular patterns in mind. Here's how to find them and let them guide you to making educated guesses.

**Tactic 1: Don't look too hard for hidden meanings in questions**
Instructors tend to mix up easy and difficult questions, but they aim the questions at the level of understanding of average students. So don't read extra meaning into ordinary questions.

If two answers look correct, give the most obvious answer. (If there is room on the answer sheet, point out the question's ambiguity or indicate how the other answer might also be correct. If there is no room or no time to do this, take it up with the teacher before you get your graded test paper back.)

If no answer seems correct, choose the one that is most nearly correct. (Again, if you have time as well as room on the answer sheet, point out the discrepancy. If not, take it up with your teacher before the test grades are given back.)

Tactic 2: Look for clues within the questions

Instructor-prepared exams are usually full of valuable clues. Learn where to look for them.

Teachers try to use good grammar in the correct answers but often aren't as careful with the incorrect ones. If the question is in the past tense, but three of the four multiple-choice answers are in the present tense, the one in the past tense is likely to be the correct answer. (But if you've got a trickster for a teacher, watch out!)

Very often, the answer to one problem is contained in a later question. Keep your eyes open for this.
AVOIDING TEST PANIC *

Tests measure students' knowledge of a subject or their ability to perform a skill. Tests are a means for students to show their instructors that they have mastered the course content, and they are a basis for instructors to assign grades. Granted, some tests are better or fairer than others, but, like it or not, the grades that are based on those tests are the measure of your success in school. Grades can determine if you will get a degree, if you will get into an advanced program, and even if you will get the job that you want.

Because tests can have all these consequences, it is quite understandable that all students at one time or another will be anxious about tests. A certain amount of anxiety is normal, and even desirable, because it motivates you to try to do your best. Just as runners get themselves psyched up before a race, actors before a performance on stage, football players before a game, lawyers before a trial, and business executives before a meeting with important clients, so students need to get themselves psyched up before a big test.

Too much anxiety, however, can spoil your performance. If you are too tense and too worried about doing well on a test, you will find it almost impossible to concentrate. When you try to read your class notes, the words seem like a meaningless blur, and when you sit down to take the test, your mind goes blank. These are the signs of too much anxiety.

In this chapter, you will find out how to be ready for a test without being panicked about it. You will learn how to psych yourself up for a test so you will be motivated to do your best, and you will learn how to relax and how to organize the course content so you will be able to do your best. These are the first steps to becoming testwise.

Relaxing

Once you are psyched up, you are ready to organize a game plan and get to work. But you need to know how to keep yourself from getting too much on edge. You want to be psyched up to work, but you don't want to be so strung out that you get nothing accomplished. Remember, it is normal to feel anxious about tests, and anxiety can help you work harder and concentrate better, as long as you keep it under control. You are aiming for high productivity, consistently high. To do your best, you need to be highly motivated, but not panicked.

In this section of the chapter, you will discover that the best way to do this is to plan your schedule several days before a test so you will be able to get enough sleep, some physical exercise, and some quiet leisure time and have enough time to study as well. Then you will learn some relaxation techniques and other ways to stay calm on the day of the test. Go over the material in this section now so that you are familiar with it. Prior to preparing for a test, you might want to review this material on relaxation if you feel you are getting too anxious.

Getting in Shape for a Test

Sleep is important. Staying up all night to study is usually not wise. It is more beneficial to get your normal eight (or six or ten) hours of sleep each night than to try to compensate for an all-nighter by sleeping late the next day. You need to be alert when you study for a test and alert when you take a test. Regular sleep habits increase your chance of a good night’s rest, and getting up at about the same time every morning means that you won’t have to rush to fit everything into the day’s schedule.

It should be noted here, however, that staying up all night to complete an important paper is acceptable once in a while-if that’s the only way to finish and if the all-nighter is not too close to test preparation days. Staying up all night to finish a paper can be an efficient use of your time because your are accomplishing an academic goal. You will be judged on your performance, which in this case is the paper. For a test, however, your performance takes place in school at the time of the test, and you must be alert to do your best. It doesn’t matter how alert you are after a term paper all-nighter, as long as you don’t miss important lecture notes or sleep through a test-preparation day. This book is not advocating staying up all night for every paper, but if, on occasion, the only way you can finish a paper and have prime hours available to study for a test, too, is to do an all-nighter, then that is the best use of your time.

In addition to regular sleep habits, taking occasional breaks from studying for quiet leisure activities and for physical exercise will also help you to stay alert. Physical activities such as running, tennis, or handball are good tension-breakers as long as they are part of your usual activities. If you do not normally participate in strenuous physical exercise, don’t start when you are studying for a test. Instead, try a brisk walk or some moderate stretching to relieve tension.

Allow some quiet relaxation time as well in order to reduce fatigue and tension. Use mealtimes as breaks from the rigors of studying, and then spend a little more time in conversation, reading for pleasure, watching a movie or television show, or listening to music. Relaxing after a meal not only helps to reduce tension, but it also improves digestion, which contributes to better health. Moreover, you are not as alert right after a meal, so studying then is not as effective has half an hour or an hour later.

A study break-whether physical activity or quiet relaxation-should be a reward for hard work. Stop studying as soon as you feel you are becoming overly fatigued. This does not mean the moment you feel a little tired. Push yourself a little further by thinking of your reward, and stop for a break when you have pushed yourself to the limit of your concentration.

What kinds of relaxation breaks do you find most appealing? List some here and use them as rewards for hard studying.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

The activities you have just listed should be used for study breaks, not distraction. Anything that competes for your attention while you are preparing for a test should be avoided. Radios, stereos, television, the telephone, and other distractions should be reserved for relaxation breaks.
Staying Calm on Exam Day

Knowing that you are testwise—that you have followed your game plan to study for the test and that you know all the techniques for taking essay and objective tests—will make you feel more confident. But even testwise students can become overly nervous just before and during a test. If this happens to you, be sure you know some proven ways to offset nervousness before it gets too serious and you lose control.

Some students who frequently experience test panic are helped by relaxation training. Some school and college counselors have training materials, usually on tape, that teach relaxation techniques. (If your counselor does not have relaxation training materials, he or she can probably tell you where you can get them or can suggest some beneficial relaxation techniques.) The basic concept of all relaxation techniques is that if you can relax physically, it is not possible to be overly anxious mentally. The training materials teach you to relax whenever you wish, and with a bit of practice you can learn to relax while taking exams.

Relaxation Techniques

There are a great many relaxation techniques. Here are a few easy ones to begin with.

- Inhale deeply with your eyes closed, hold your breath, and then exhale slowly. Do this several times if you need to.

- Sit back in your chair and get as comfortable as possible. If your shoes feel uncomfortable, slip them off; no one will notice your feet under the desk or table. Try loosening your entire body. Close your eyes for a few moments; you should feel more calm and relaxed.

- Tighten all your muscles from head to toe, and hold them. Then let all your muscles loosen.

- Tighten your muscles and then systematically (toes to feet to ankles to calves to knees and so on) loosen each part of your body.

Practice these relaxation techniques before the test so you will be familiar with them at exam time. Then repeat these tension-breakers as often as necessary during the test.

In addition to these relaxation techniques, there are a number of other things you can do just before and during a test to keep anxiety at a minimum.

1. **Get a good night’s sleep.** Even though cramming will be recommended later in the book as a test-preparation technique, it doesn’t necessarily mean staying up all night before a test!

2. **Eat some breakfast or lunch before the test,** but avoid greasy foods and foods with high acidity. Having food in your stomach may help calm nervousness and give you energy. But don’t overeat, because that could make you sluggish and sleepy.

3. **Allow yourself the necessary time to get to the place of the test.** If you are already nervous, rushing will only make you more so.
4. **Don't stand around and talk to others just before going in to take the test.** They may confuse you or make you nervous about your preparation. Instead, use those precious moments before the test to quietly review your condensed notes. (Techniques for condensing your notes will be explained in Chapter 3.)

5. Review Chapter 6 so you will be ready when you enter the testing room and will know just how to proceed.

6. **Don't panic if others are busily writing and you are not.** Your thinking and organizing may be more profitable than their writing. You will have your own strategies for taking the test.

7. **Don't be upset if other students finish their tests before you do.** Use as much time as you are allowed. Remember, you are prepared. Students who leave early may not be testwise and are not always the best prepared students.

8. If you feel very tense during the test, **remind yourself that you are a player in this game.** Stress is part of it; you will hold up well under the stress. You will play the game and do it well; then you will be able to leave and give yourself a reward for a game well played.

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**Organizing Your Course Content**

All of the information in this chapter about getting in the proper frame of mind for tests and all the information in the rest of the book about studying for and taking tests will be of little use without a thorough knowledge and understanding of the contents of the course that come from lecture notes and reading. So the rest of this chapter will be devoted to suggestions for making your course contents useful test-study resources.

**Lecture Notes**

When it comes time to study for a test, a thorough set of lecture notes will be essential. (Chapter 3 will provide techniques for using your notes to study for a test.) Your care in note-taking from the very first day of class is crucial for later test-taking preparation. Here are some tips to help you build an orderly and thorough set of notes.

1. **Go to all classes and take notes on everything the instructor emphasizes.** If possible, sit as close to the instructor as you can so you can hear and see everything.

2. **Be a good listener.** Be alert to what the instructor is saying as you are taking notes. You have to train yourself to concentrate on what is currently being said while recording ideas that have already been said.

3. **Keep notes for each course separate from notes for the other courses.** This is easier if you use a loose-leaf binder or file folder rather than a spiral-bound notebook. You want to be able to reorganize your note pages and add handouts later when you study for tests.

4. **Take notes on one side of the page only, and record the name or number of the course and the date on each page.**

5. **Use standard-size notebook paper.** Try to leave spaces between topics as they change. (You'll find an example of class notes in Chapter 3 on pages 47-49.)
6. Make your notes complete and clear enough so they will have meaning later. You should not write in full sentences; phrases are fine, but be sure that they make sense to you and that you have the whole idea.

7. If you missed something important, stay after class and ask the instructor about it so you can fill in the gap in your notes.

8. Write legibly.

9. Develop abbreviations of common words and recurring terms so you can save time while taking lecture notes.

10. Use a symbol, such as an asterisk (*), to mark the points the instructor emphasizes.

11. Keep assignments or suggestions for readings separate from lecture notes but close enough to indicate which lecture they were related to. One good place is at the end of your notes on each topic.

12. If ideas or examples come to mind as the instructor lectures, jot them down but label them "me" or identify them in some other way so you won't get your thoughts mixed in with the instructor's words.

13. Be alert for clues to test items. Sometimes the instructor will say, "This" is important," or "I might ask you this on a test," or "You will see this again." You might want to asterisk and underline these items in your notes.

14. Always record your instructor's examples exactly as they are given. They might turn up again in similar form on a test.

15. Copy all charts, diagrams, and lists exactly as your instructor puts them on the chalkboard.

16. Stay to the end of the class and keep taking notes to the end. Sometimes instructors run out of time and will crowd half the planned lecture into the last five minutes.

17. Don't rely on a friend to take notes for you unless you have to be absent. The notes may not be good, or even if they are, they may not trigger the same information to you as they do to someone else. Therefore, they will not be as effective as notes you take for yourself.

18. If you are absent, do copy someone's notes. Try picking someone in class who takes good notes and knows what is going on. Read over the notes. If you do not understand something, ask the instructor first. If you can't ask the instructor, then ask the person who took the notes.

19. At the end of the day, go over your notes from all of your classes. Fill in the places that seem incomplete; in a week, your memory of the lecture won't be as clear. Whenever possible, it is an excellent idea to label your notes for each class by topics covered during the lecture.
20. If the instructor gives out any handouts with a lecture, label the handouts with the course name or number and date. Later, group those handouts with the appropriate lecture notes by punching holes in the handouts and putting them behind the notes in your binder or folder.

How to Read a Textbook Step-by-Step

Step 1: Pictures. Go through the entire chapter and look at all the pictures, tables, charts, diagrams, graphs, maps, and other illustrations. Read and written notations under or above the illustration for clarification and read all the information in tables, charts, and other illustrations containing statistical data.

Step 2: Introduction. Most well-written chapters have an introduction. This will usually be the first few paragraphs. Read the introductory paragraphs to each assigned chapter and try asking yourself the factual questions that a reporter asks—who? what? where? when?—and the inferential questions that a reporter asks—why? and how?

Step 3: Bold Print. Read all the bold print from the beginning to the end of the chapter or selection. Very often, the bold print serves as an outline of the chapter.

Step 4: Summary. Most well-written chapters have a summary or some type of wrap-up paragraphs. These will usually be at the very end of the chapter. Read the summary paragraphs.

Step 5: Questions. If there are questions or points for discussion in the chapter or at the end, read them over. These questions will often be clues about the most important information in the chapter.

Step 6: Skim. Starting at the beginning of the chapter, read the first and last sentence of each paragraph. The first sentence is usually a key one. The last sentence usually wraps up a thought and ties it in with the first sentence of the next paragraph. After reading the first sentence in a paragraph, skim through the following sentences until you come to the first word of the last sentence and then read that sentence.

Step 7: Read. Starting at the beginning of the chapter, read it all the way through. Whenever you come to the bold print, turn it into a question and read to answer that question.

Step 8: Note-taking. Fold a sheet of loose-leaf paper in half vertically. On the left half of the paper write the bold-faced headings from the chapter. On the right half write a few key words or phrases that will answer the questions you asked from the bold print in Step 7 as well as any words, phrases, or ideas that might be a test item.
Perhaps this scene has been played out in your home: one day your third-grader, who is intelligent, studious and gets good grades, comes up against an unfamiliar kind of test. The teacher says it's important and passes out test booklets, answer sheets and special pencils. Instead of being friendly and helpful, the teacher remains cool, won't answer questions and keeps warning the class about the time limit. Panicky and upset, your son finishes the test and comes home in tears, convinced he has done poorly. Sure enough, when his score is computed, it is well below what his previous record might have predicted.

This is no insignificant setback. As schools rely more and more upon standardized, computer-scored tests to measure students, that score can, at least in part, make or break your child's educational career. Test scores help decide who gets into the most sought after colleges, who qualifies for the most desirable classes and who has to repeat a school year. Once classified a failure, a low scorer may fall into a pattern of underachieving called "learned helplessness."

Tests confront our children at every level of education. Last year, over three million high-school students took the Scholastic Aptitude Test (SAT) or American College Test (ACT), which colleges use to help pick their freshmen. Over four million elementary and junior-high students take the Iowa Tests of Basic Skills (ITBS), which some schools use to slot students into "fast" or "slow" learning tracks. By Georgia law, all public-school children planning to enter first grade must take a standardized test. "The long-term implications are distressing," says one California educator. "These kids believe their futures depend on their test scores."

Do scores on standardized tests accurately assess a student's abilities? Only partly, say the experts. "Every test measures two things," says Robert Cohen of Princeton Review, which prepares students for the SAT, "the subject matter and how well the person takes tests." Some kids thrive on tests; others panic. Prof. Kennedy Hill, of the University of Illinois, who has studied "test anxiety" in children for 25 years, says that one-fourth of all elementary-school students are so stressed by tests that they perform substantially below their capabilities.

Test anxiety can be overcome, though, and students can be taught to perform better on exams. Here is what experts say you can do to help your child score better:

1. Find out when tests are scheduled. After an official at the Educational Testing Service in Princeton, N.J., which administers the SAT, discovered that his 11-year old daughter had been given a reading placement test a few days earlier, he called her principal. "I told him that I had a right to know about the test and its uses," he recounts. "And I say that as a tester as well as a parent."

Ask your child’s principal to announce standardized tests well in advance, either in the school newsletter or in a letter home. Find out exactly what tests are being given and how the scores will be used. Good schools use tests to find out where children need help, not to label them "smart" or "dumb." Parents should insist that testing be used primarily for such diagnostic purposes.

2. Learn how the test works. Standardized tests differ from most classroom quizzes in that a student must "use his head," not merely his memory. For example, an elementary-school reading-comprehension test might describe a scene in which leaves are falling and ask: "In what season of the year does the story take place?" Even without the word "autumn" appearing in the paragraph, the child would be expected to figure it out from the context.

One-third of the SAT mathematics section is devoted to quantity comparison. The test-taker is asked to compare two given quantities and mark choice A if quantity A is greater, B if quantity B is greater, C if the quantities are equal or D if not enough information is given. One recent example: Of 100 freshmen, 30 are taking history but not calculus and 50 are taking calculus but not history." Quantity A is "the number of freshmen taking both history and calculus"; quantity B is "19." The correct answer is D, since the number taking both courses can't be determined from what has been stated; it could be any number from zero to 20. Only 21 percent of students answered the question correctly.

"Students just aren't used to facing this sort of problem," a counselor says, "It really throws them."

3. Teach your child "test smarts." Knowing how to take a test is crucial. Here's what to tell your child before the test:

- Time counts. Be sure to take a watch. If you can't answer a question quickly, don't dally. Return to it after you have completed questions you can answer easily. Use pencils-with erasers-that aren't sharpened too much; you can fill in answer blanks faster with slightly dull ones.

- If you skip a question, skip the answer space too. "You'd be surprised how many students answer question 21 in the space for Question 20, then have to waste time erasing and changing answers," says Richard Noeth, executive director for admissions and guidance at the Educational Testing Service.

- If you're not sure of an answer, it might help to guess. The SAT penalized blind guessing by deducting a quarter-point for each question answered incorrectly. But if you can eliminate one of the choices, you increase your chances of guessing right enough to offset the penalty. If you can eliminate two choices, the odds are better yet. Beware of easy answers, though. Test-makers say they don't include "trick" questions; however, they sometimes insert a "distractor" that appears on a glance to be correct, but isn't. That's to make the test-taker think through each answer.

- Relax the night before. Last minute cramming doesn't help; a good night's sleep is better. Read, watch television, chat with family or friends. Before bedtime, make sure everything is ready for the next morning. On test day, dress appropriately so you won't be distracted by being too hot or too cold.
4. Practice, practice, practice. Anxious parents spend millions of dollars on commercial courses to prepare kids for the SAT and ACT. But you don't have to pay through the nose for such a course. More than half of American high schools offer free SAT and ACT preparation courses. An elementary-school program developed by Kennedy Hill is used in some lower grades to help test-anxious kids.

Opinions differ on how much preparation courses actually raise test scores. Everyone agrees, however, that some sort of preparation is valuable simply because familiarity lessens the scariness of a test. Just having read the instructions ahead of time can save critical minutes when the test is given.

The Educational Testing Service furnishes a free SAT guide, which explains how the test is structured, scored and timed. The booklet includes a previous test, an answer sheet and tabulation of how many students answered sample questions correctly in the past. The American College Testing Program provides a similar booklet for the ACT. The Riverside Publishing Company distributes free pamphlets explaining the 13 basic tests of the ITBS and their uses. These guides usually can be obtained through the schools.

The biggest benefit of test-preparation courses is that students take practice tests again and again, until it seems they can do tests in their sleep. Jay Comras, who designed test-preparation materials for the National Association of Secondary School Principals (NASSP), says, "Experienced test-takers score better than inexperienced ones."

Parents can stage practice tests at home by using samples from SAT or ACT booklets, or perhaps by obtaining outdated tests from their child's elementary school. Schools will usually supply a sample answer sheet, so that young children can learn to fill in the answer spaces properly.

At home, strictly follow the test's ground rules. Set a time limit, don't permit questions and forbid interruptions for phone calls or snacks. "Practicing under real conditions helps the student learn how to pace himself and uncovers strengths and weaknesses," Richard Noeth says. "On test day, he'll understand the instructions and know how to work quickly at things he does well before turning to areas where he is less successful."

5. Challenge your child's mind. According to Stanley Kaplan, founder of the Stanley H. Kaplan Educational Center Ltd., the single most important influence on verbal performance is how much the young person reads. "Show me an avid reader," Kaplan says, "and I'll show you a high verbal scorer." Start a reading program early, as soon as your child can hold a book. When he can read for himself, buy a dictionary and encourage him to look up words. He doesn't have to start by reading the classics; even comic books will help. The goal is to nurture a lifelong reading habit.

Foster good study practices and urge your kids to tackle tough courses such as science, math and foreign languages that stretch their minds and sharpen their thinking and reasoning skills. Jay Comras, consultant to the NASSP, says that the students who have studied two or more years of a foreign language average 100 points higher on the SAT verbal section because they know about prefixes, word roots, derivations and other clues to word meaning. Those who have taken two years or more of Latin score higher yet.

6. Keep tests in perspective. Pushing your child to do better on important tests can actually make him do worse, according to Prof. Charles Spielberger, a test-anxiety expert at the University of South Florida. "Thoughts like If I don't pass this
my parents will be really angry distract a student's concentration and lower his scores," Spielberger says.

Students who perform best have supportive, understanding parents. They know tests are important, but no single test is do or die. A child can always try again. Almost half the students repeat the SAT; about one in five repeat the ACT test. According to Kennedy Hill, a student's highest score is the most valid, because it shows the student's true capability. That's why you should ask for a retest when a score is low.

Even test-makers insist that no single score or group of scores is a sure-fire predictor of success. No test completely measures a child's creativity, guts or will to succeed. And, in the long run, these qualities often prove more important than any test scores.

But remember that tests, for all their drawbacks, will remain an important fact of children's lives. And, just as you want them to learn to swim, you must help them to master this survival skill.
Establishing Good Study Habits
Establishing Good Study Habits

Introduction

This is the "How to Study" section of our study skills curriculum. Included here is information concerning the six areas of thinking, improving study skills through inference making, organizing a notebook, tips on study habits, memory, and reading faster, and studying and managing time. All the information in this section is absolutely outstanding! We would like you to notice particularly the following parts:

1. "Organizing a Notebook"
2. "Ten Ways of Study that Work"
3. "Twelve Tips for Studying and Managing Your Time"

"Organizing a Notebook" provides practical information for you students to get organized and prepared for class and for studying. Some of the information will need to be modified slightly for the adult student, but all of it is useful and helpful.

The "How to Study" material is extremely transferable to the needs of school age children. So often, our children find the management of school difficult because they do not have the skills to make school life organized, productive and efficient. All of the material in this section will provide children with a means to be organized and the know-how to be better managers in school. Any time we provide our children with important survival skills, we are giving them the opportunity to be better, more productive students.

We encourage our students to get organized quickly, to establish some good, sound study habits, and to develop ways to get as much as possible from the material they are studying. We encourage you to do the same with your students. The information provided for establishing good study habits should enhance your own study skills program and challenge your students to greater achievements.
STUDY SKILLS AND THINKING *

The following six kinds of thinking overlap one another but may be described separately:

PERCEPTUAL THINKING. This kind of thinking is less directed toward a goal or conclusion and most affected by the environment. The student is shown a photograph of a sun spot and may "think" sun or spot. This is not higher-level thinking, but it does involve selection of certain items from many presented.

ASSOCIATIVE THINKING. This occurs when one object or idea triggers the memory to link it to other object and ideas. Sun may stimulate the student to think of summer, baseball, escape. Such thinking is not directed consciously toward a goal but is influenced by the student's memories of past experiences and dominant interests at the moment.

INDUCTIVE-DEDUCTIVE THINKING. This thinking occurs when a student tests out an idea either by checking to discover if examples "fit" a given rule or principle (deductive) or to discover the principle by an experiment (inductive). Both are goal-directed and may be defined in terms of the six stages previously listed.

PROBLEM SOLVING. This type of thinking is best defined in terms of the six stages: The student senses a problem, defines it, gathers relevant data, forms hypotheses, critiques the hypotheses, and tests out the best ones.

CRITICAL THINKING. This occurs when the student evaluates the data he or she collects. Some of it may be irrelevant to the problem, some of it biased, and some of it false. Critical thinking clearly overlaps the other five kinds of thinking described here.

CREATIVE THINKING. This thinking takes place when the student goes beyond the routine solution of a problem to a fresh discovery or new invention. It is related to both associative thinking and problem solving and is often labeled imaginative or divergent thinking.

IMPROVING STUDY SKILLS THROUGH BETTER INFERENCE-MAKING

When a passage in a textbook reading assignment simply triggers knowledge already stored in students' memory, not much thinking takes place. Eleventh-graders trading once again about the American Revolution or the Great Depression of the 1930s go through their assignments adding perhaps bits and pieces of new information to memory, possibly changing their perspectives slightly, but chiefly being reminded of events they have already heard and read about in previous social studies classes. They are not called upon to do much active thinking. They are comparable to the general reader confronted by signs such as EXIT or NO SMOKING: comprehension is immediate and effortless, because the words serve as reminders of what is already known and understood. Little or no thinking is required to comprehend such texts.

When, on the other hand, assignments deal with information and ideas students only partially possess (or do not possess at all), students must think. They must actively compare the new material with what they already know, in order to discriminate more carefully, to hypothesize, to evaluate, to check and recheck, to look for evidence, to draw conclusions, and so forth. These mental behaviors are cognitive processes, referred to by some authorities in the past as higher mental processes or by contemporary cognitive psychologists (Anderson 1980) as cognitive skills. Most teachers usually call them thinking skills (see major section above).

One thinking skill seems to predominate in all mental activity: the ability to infer, or to make inferences. Together with such related skills as "recognizing the inferences of others," "evaluating inferences," or "finding evidence to support inferences," inference-making lies at the center of many other mental processes such as drawing conclusions, predicting, and hypothesizing. Because it is so important to study, learning, and comprehension, teachers need to investigate the process and ways to improve it.

Organizing A Notebook*

Decide on a system of organization and STICK WITH IT! Using a system of organization consistently will help you be successful in school. Two systems that work very well for most students are (1) the one-notebook system of organization and (2) the multiple-notebook system of organization. USE THE SYSTEM THAT WORKS BEST FOR YOU!

1. If you use the one-notebook system of organization, you should place the following items in order in your notebook:
   a. Zipper bag with the supplies needed for each class. Below are supplies you might need:
      - pencils
      - eraser
      - ruler
      - reinforcements
      - small stapler
      - highlighter
      - pens, blue or black
      - red pen
      - green pen
      - liquid paper
      - scissors
      - compass and protractor
   b. Plastic sheet protector which holds your class schedule on the front and your study schedule on the back.
   c. Assignment notebook. Choose the one you prefer to use.
      (1) Assignment book (7½" x 5½") that fits in the rings of your binder.
      (2) A thin 10 1/2" x " spiral. Mark columns like the sample sheet included at the end of this section.
   d. Notebook paper. Make sure you use the type of paper your teacher requires.
   e. Graph paper or special paper. Use the appropriate size.
   f. Pockets with tabs for each course. Usually you have to purchase the pockets and tabs separately.
      (1) Label the tabs in the same order as the order of your classes during the day.
      (2) On the front of each pocket write the following course information:
         Course name:
         Time:
         Teacher’s name:
         Teacher’s office:
         Teacher’s free period:
         Names and phone numbers of two other students in class:
      (3) Use the front of the pocket for handouts, returned papers, and tests. File these in the appropriate place as soon as possible.
      (4) Label the back of the pocket, "(Course Name) Homework." Put your homework in that pocket as soon as it is finished. Then you will know where it is when you are ready to turn it in.
   g. Place a grade sheet behind each pocket. See the example included at the end of this section.
   h. You may wish to use two to four dividers after each pocket. As an example, possible subheadings for "Social Studies" dividers are:
      (1) Class notes
      (2) Reading notes
      (3) Quizzes
      (4) Tests
   i. You may wish to include a spiral in your binder if one is required.

2. If you use the multiple-notebook system of organization, you should:
   a. Use one notebook for the following general supplies:
      (1) Zipper bag with supplies. See list under "One-Notebook System" 1. a.
      (2) Plastic sheet protector which holds your class schedule on the front and your study schedule on the back.
      (3) Assignment notebook. See list under "One-Notebook System" 1. a.
      (4) Notebook paper
   b. Have a separate notebook and spiral for each subject. Color code your subjects. For example, have a green notebook and a green spiral for math and a red notebook and a red spiral for science.
   c. Place the following items in order in each of your separate subject notebooks:
      (1) Grade sheet
      (2) Two to four dividers. Possible headings for the dividers are:
         (a) Class notes
         (b) Reading notes
         (c) Quizzes
         (d) Tests
      (3) One pocket
         (a) On the front of the pocket place the following course information:
            Course name:
            Time:
            Teacher's name:
            Teacher's office:
            Teacher's free period:
            Names and phone number of two others students in class:
         (b) Use the front of the pocket for handouts, returned papers, and tests. File these in the appropriate place as soon as possible.
         (c) Label the back of the pocket, "(Course Name) Homework." Put your homework in that pocket as soon as it is finished. Then you will know where it is when you are ready to turn it in.
   d. You must also plan to write ALL assignments for each subject in the SAME assignment book.
   e. If you prefer to carry only one notebook and one spiral to class, you must plan to include in each notebook a zipper bag with the appropriate supplies, notebook paper, and any special paper required.

ORGANIZING A STUDY AREA

1. Clear away all distractions.
2. Make sure you have all the necessary supplies handy.

___pencils ___eraser
___pens - red, green, and black ___ruler
___plain paper ___stapler and staples
___lined paper ___dictionary
___special paper ___thesaurus
___paper clips ___protractor
___reinforcements ___compass
___liquid paper ___highlighter
___scissors ___Scotch tape
___map pencils ___markers
3. Have a file folder for each course. Or you may wish to have two file folders for each course, one for graded homework assignments and one for tests and quizzes. At the end of each week or at the end of each marking period, file your papers, tests, and quizzes in the folder(s). KEEP THEM! YOU WILL NEED THESE PAPERS WHEN YOU REVIEW FOR THE FINAL EXAM.

4. Have a calendar on your desk. Mark tests in red and long-range assignments in green.

ORGANIZING A STUDY SCHEDULE

1. A sample study schedule follows this section. Fill in ALL commitments on your study schedule:
   ___ names of courses
   ___ family or religious commitments
   ___ athletic or instrumental practices
   ___ meals

2. Outline available study time in red.

3. Make a new study schedule with the information on it that does not change from week to week.

4. When a teacher announces a test, write "TEST" in red on your study schedule on the appropriate class square and day.

5. Select your hardest course and schedule study for it at the best daily time. Don't leave your hardest class to last!

6. SCHEDULE TIME FOR REVIEW.
   a. Go over notes after lecture classes.
   b. Brush up for discussion classes.
<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
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</tbody>
</table>
GENERAL HINTS

1. Assignment Book
   a. Write your assignment down IMMEDIATELY!
   b. Set your assignment book up like the sample assignment sheet which follows this section.
   c. Check the square in front of each assignment after that assignment is completed.
   d. Keep your assignment book in your notebook so you KNOW where it is.

2. Grade Sheets
   a. Use a new grade sheet for each marking period.
   b. Record all scores PROMPTLY.
   c. Organize each grade sheet appropriately. See the sample grade sheet for math which follows this section.
   d. Each weekend look over your grades for each course.
   e. Determine your approximate average for each course.
   f. If necessary, determine specific steps you must take in order to be successful in a course.
      (1) Do you need to make an appointment with your teacher?
      (2) Do you need to plan more review sessions in your study schedule?
      (3) Do you need extra help?

3. Notebook
   a. Each weekend plan time to organize your notebook.
      (1) Punch holes in papers and tests that have been returned.
      (2) File them behind appropriate dividers.
      (3) MAKE SURE EVERY PAPER HAS A DATE.
      (4) Sharpen pencils.
      (5) Replenish supplies.
   b. At the end of each week or the end of the marking period, file your graded papers and tests in a file folder in your desk. You may wish to use two file folders for each class, one for homework papers and one for tests and quizzes.

4. Organize your books, instruments, and athletic equipment, etc. before you go to bed. Place EVERYTHING you need to take to school in a handy place by the door so you will not leave anything at home.

5. Try keeping your books and school supplies in a backpack or bag.

6. Let your teacher know you are interested in improving your work.
   a. Be attentive and interested in class.
   b. Make an appointment and discuss your problem with the teacher.
   c. Ask your adviser for suggestions.

   a. Form letters properly.
   b. Be consistent.
      (1) Do not mix cursive and manuscript.
      (2) Use upper case only when appropriate.
   c. Make small letters like "o" and "s" the same height.
   d. Slant your letters the same way.
   e. Write ON the lines of your paper.
   f. If you are required to use ink, you might consider using an erasable pen. Or you may prefer to use liquid paper to correct a mistake.
   g. REMEMBER - A NEAT PAPER MAKES A GOOD FIRST IMPRESSION!
<table>
<thead>
<tr>
<th>Date</th>
<th>Subject</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| Monday 10/12 | Math | - Text - pp. 38-39, #1-21  
- Study Ch. 1 math notes  
- Math test corrections due  
- Attend extra help session after lunch on Tues. |
| | English | - Read literature test, pp. 25-41  
- Grammar test, p. 63, diagram sentences #1-10 |
| | Social Studies | - Write outline for report  
- SS test, p. 8, answer questions #1-2. Use complete sentences |
| | Science | - Read Chapter 6, pp. 59-67  
- Do matching exercises on p. 68 |
| | Latin | - Finish vocabulary exercise on p. 73  
- Make flashcards for new vocabulary words  
- Test Friday over Chapters 3, 5, and 6 |
# Grade Sheet Example

## Grade Sheet - Math

### 1st Quarter

<table>
<thead>
<tr>
<th>Tests</th>
<th>Grade</th>
<th>Quizzes</th>
<th>Grades</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Grade</td>
<td>Quizzes</td>
<td>Date</td>
<td>Grade</td>
</tr>
<tr>
<td>9/15</td>
<td>29</td>
<td></td>
<td>9/9</td>
<td>7/10</td>
</tr>
<tr>
<td>9/22</td>
<td>72</td>
<td>80%</td>
<td>9/11</td>
<td>8/10</td>
</tr>
<tr>
<td>9/29</td>
<td>97</td>
<td>86</td>
<td>9/16</td>
<td>7/10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9/18</td>
<td>7/10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2/20 = 72.8%</td>
</tr>
</tbody>
</table>

### Other Grades

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/21</td>
<td>Report on Einstein</td>
<td>C+</td>
</tr>
<tr>
<td>9/28</td>
<td>Trigonometry</td>
<td>B</td>
</tr>
</tbody>
</table>
TIPS ON LEARNING *

The Time and Place for Study

Now for some practical suggestions for the arrangement of your study schedule -- in other words, a time-budgeting plan. First of all, it will pay big dividends if you will set aside a few minutes or an hour as soon as possible after classes each day to review the material covered in the class periods that day. A large portion of what is ultimately forgotten is forgotten within twenty-four hours after being heard or read for the first time. If, at the end of your regular school day (or in the middle of it if you have a study period), you will review the material in each of the classes you have had that day, before it has had time to get away from your mind, your memory for that material will be stepped up tremendously. This is just simply sense. It is obviously easier to review familiar material and fix it firmly in your mind than to re-learn material that you have forgotten. So take a few minutes to review today's work before you go on to something else. These few minutes of review shortly after your classes will give you more learning and memory in less time than almost any other study time you spend.

Second, have a regular time set aside for your other study, that is, your study in addition to your review. If you can arrange it at all, it is a good policy to have a certain time each day set aside, and to study at the same time each day. Doing this will help avoid the problem of having studying to do and letting the time slip up so that it doesn't get done. All of us have had this experience. We have the best of intentions to get a certain job done but just don't get around to it until it is too late. If you have a routine of studying at a certain time each day, and simply avoid scheduling anything else for that time, it gives you the best possible chance to avoid missing your study due to poor management of time.

Third, have one particular place that you go to study. This does not mean that you can't study anywhere else. It does mean that whenever you have serious studying to do you should try to go to this place to do it. We have already talked about the desirability of avoiding distractions when you are studying, so it is unnecessary to spend much time her describing the characteristics of a good place for study. Briefly, it is a place where conversation, the activities of friends, interesting noises, or reminders of things more pleasant than study are not competing with your wait for your attention. A table facing a wall and containing nothing but your actual work materials is best, and your chair may have a soft cushion but should not be so luxurious that is encourages you to relax completely.

The Habit of Studying

Habit can help study. If you get the habit of going to a certain place at a certain time to study, you will find that it becomes easier for you to concentrate. You lose less time in warming up to your subject because you will unconsciously begin to get into the proper frame of mind for study when you come to your study place at the study time. When doing this becomes a habit you have mad a lot of valuable progress, because it is then easier to make yourself go through you study routine. In other words, going to a regular place at a regular time for study not only enables you to get started studying more easily and to study more effectively, but is substituting the habit of study for will-power forcing you to study. One army veteran who returned to school, anxious to force himself into a study routine that he knew would be difficult for him, hit on the idea of arranging with his parents to let him out of his room-and-bath at seven-thirty each morning. Then,

each evening, he would go into his room, which contained only the bare necessities of life, lock the door, shove the key under the door, and be left with nothing but his work to occupy his time until next morning. You probably will not care to follow this heroic example, but it enabled the veteran to pull himself out of an academic hole which looked hopeless, and it illustrates beautifully the policy of a definite time and place for study carried to the last degree.

A Note on Memory

Obviously, learning is no good unless it is remembered. Don't say, "I just can't remember things." Your memory is good enough to serve you satisfactorily if it is properly used. You have the mental ability to remember as much as is necessary, providing you use that ability in the way we will explain here. There are two general points which will help you use your memory most effectively. The first is intention to remember; say to yourself, "Here is something I must remember; here is something that I am going to keep because it is necessary for me to remember it." That and that alone will enable the average person to double the efficiency of his memory. Most so-called "forgetfulness" and "absent-mindedness" is not due to inability to remember, but simply failure to attempt to remember. For instance, it is silly to suppose that the professor who is a walking encyclopedia of technical knowledge on a technical subject is unable to remember where he put his pencil if he intends to remember where he put it. His failure to remember is due to the fact that he wasn't paying any attention to what he was doing. He didn't forget where he put his pencil. He never really noticed where he put it in the first place. In your study, if you really make the attempt to select important points and file them away in your mind for permanent reference, you can do a much better job of remembering them than you usually do.

The second factor to consider is familiarity with material. One way of expressing this principle is as follows: the more facts you can relate to a subject, the better you will remember that subject. As an illustration, if you know not only the name of a man but what he does for a living, you will tend to remember that man's name better than if you know nothing whatsoever about him except that his name is John Smith. Gathering and organizing a group of facts so that they support each other and call each other to mind will assist you in remembering them much better than if you tried to remember each of them separately. This, as you may note, is another use of the factor of getting the big picture, the organization.

How To Read Faster

A great many people feel that they are handicapped in their study because of their low speed of reading. Some merely moan about their hard luck in being slow readers, and others try to do something about it. Those who take the trouble to try, find that they can step up their rate of reading a great deal very quickly and without losing any of their learning effectiveness on what is read.

There are commercial courses which claim to train you to read much faster while remembering just as much of what is read. They report gains of from 35% to as much as 200% in speed of reading made in a little as twenty hours of laboratory time distributed over six or eight weeks. The actually produce such improvement, too! Without exaggeration it can be said that most such courses will actually enable the average person to read at least a third faster and still remember as much of what he reads. What is not generally known, however, is that a determined student, willing to make a real effort, can usually make just about as much progress in improving his speed of reading without any outside help at all!

In improving reading, first of all we should recognize one important fact: Most of us do not read as fast as we can, or even as fast as we can comprehend what we read. Just
as we do not walk as fast as we can in our usual walking, but rather walk at a gait that is easiest, most convenient, and most restful to us, in the same way we read at a pace that is easiest rather than most efficient. Because this is true, the average student can increase his rate of reading anywhere from one-fifth to one-third through merely sitting up alertly, concentrating on material to be read, and pushing along as fast as he can instead of drifting through his usual comfortable rate. We have all done this many times when we were in a hurry to get an important message read. The laboratory course in fast reading is simply designed to make this pattern of reading a habit. There are ingenious mechanical devices to encourage you to speed up your reading and to keep it fast, but you can do it about, if not quite, as well in your own room through your own will-power if you work at it.

Take one of your subjects and time yourself as you read through an assignment of, let us say, five pages at your usual rate of speed. Next day take another five pages and see how fast you can drive yourself through it and still comprehend what you are reading.

Force your eyes to take in big gulps of a line and shift rapidly from one gulp to another, rather than moving in slow, leisurely sips. At the same time, force your mind really to get to work on the job and dig away at the subject with the idea of taking in everything that the author is saying. Reading faster has to be a process of team work between your body and your brain. Your eyes and your whole body have to be geared to intensive physical action to cover the material being considered. Your mind has to be in there working to catch this material as fast as it is covered, rather than sitting passively by hoping that bits of material will stray into it and stay there. You will find that even the first time you try to push up you speed of reading you will read distinctly faster, and probably with even more comprehension and memory than you have in the past. Record your timing for this second day's reading. See how much improvement you have made.

Next day do the same thing again, still timing yourself, and note your improvement. About the fourth or fifth day take in another of your reading subjects and use the same method on it. Always be alert to check your mind to see if it is really taking in what your eyes are covering. You will be surprised at the difference this makes in how much you remember. As a matter of cold fact, most people find that they are remembering more after they have improved their reading rate 30% than they were at the old slow rate. This is because their minds had been loafing even more than their eyes under their old method of study.

The gains that you make in your reading speed (and perhaps even in comprehension) are likely to be both quick and spectacular when you start the time-comparison routine we have just described. The important thing, however, is to continue this hard-work approach to reading instead of your old easy-going approach until it becomes a habit. It is easy to pick up your reading speed a lot just by trying to do so, but unless you try to do so regularly enough and over a long enough period of time you will not register much permanent improvement, because you will tend to fall back into you old leisurely habits. It is here that the reading laboratory has its greatest advantage. It sets us a condition in which the student is highly motivated to read at his fastest possible rate and does not have to depend on his own will-power so much to keep him putting out his maximum effort. It keeps him going at this pace until he becomes accustomed to it, until it becomes his normal way of reading. He has then formed the habit of speed reading.

Furthermore, the more you exercise this speed-up approach to reading, the higher your gains are going to be, as well as being more permanent. Perhaps you don't want to read faster. Perhaps you had rather read at a leisurely stroll than at a brisk pace. If you have time to get what you want from your reading without speeding up, there is probably no good reason why you should speed up. On the other hand, if you feel that greater speed is a desirable thing for you, you do not have to sit and just wish what you could read faster. You can read faster, and pretty quickly at that, if you are willing to put forth the effort to force yourself to read as fast as you can in most of your reading.

Some people prefer to use novels or other recreational reading to develop their
speed, and only apply their increased speed to their lesson study after it had become a pretty well set habit in recreational reading. One way is not better than another, so if you don’t like to improve your speed in reading while studying you may still be able to do so in your recreational reading. And if you had rather spend dollars than will power to improve your reading speed, look around for a reading laboratory!

A final tip on fast reading: Some material can be read faster than others. Difficult, complex material can’t be read effectively at as fast a rate as simple recreational reading material. Efficient reading requires that you vary your speed of reading to fit the difficulty of the material and your purpose (amusement, comprehension, general idea, etc.). It comes naturally to do this. It will take care of itself if you force your eyes to go just as fast as, and no faster than, you can force your brain to take in the material seen.

Study Principles

Finally, let us consider three important principles for you to remember and to apply in your study.

1. Distributed practice. If you have a certain amount of time to spend studying a subject, try to budget your time so that you spend some time each day on the subject, rather than concentrating it all in one long splurge. By distributing your study of material, you will learn it better and you will remember it much longer and more effectively.

   Your mind had to be reminded of things occasionally in order for those things to be remembered. After being reminded of a thing a few times, the memory does not "fade out" as fast or as completely. Review is simply repetitions of material spaced at times when you particularly need to remember it, so the things said about repetition in regard to learning apply to review as an essential of memory.

2. The curve of forgetting. Forgetting takes place most rapidly shortly after you stop studying a subject. The greatest loss is within a few hours. The speed with which you forget gradually slows down as time goes on. Arrange your review of material to take place first the day after it is studied, a second time about a week after that, and finally a few weeks later. You will find that this distribution of practice is a review schedule which will prove most useful in insuring the maximum memory of the material which you have studied and which you are reviewing. Perhaps you won’t have time to review all your study material at these specified intervals and in detail, but if you will carefully select the material that it is especially important for you to remember, and review it according to this schedule you will probably get the retention of it that you need.

3. Proceeding from the whole picture to the details. When you go to work on a topic, get the general picture of the topic in mind, the general pattern and framework of it, the objectives and the plan of attack. After doing this, study it closely to get the details.

   P.S.: There is no substitute for time and work in learning. However, if you practice the procedures and principles set forth in this manual you will get more learning and remembering for whatever amount of time and work you spend in studying.
A new school year -- with all its possibilities and promise -- lies ahead for all of us. The marks you make this year can pay you well -- in helping you enter the college you want, in bringing you nearer to the lifework of your choice, perhaps in college scholarships.

At this moment the year's ahead -- make the most of it!

Efficient ways of study are not a matter of guess. Psychologists have been working for years on how to study. Research on the best methods of study has been conducted at top universities -- including Stanford, Ohio State, and Chicago. There, careful experiments with groups of students have thrown light on way of study that are best. By using these ways, you should learn more easily, remember longer, and save hours of study time.

The suggestions that follow are based on the results of these experiments.

1. Make and keep a study schedule
   Set aside certain hours each day for homework. Keep the same schedule faithfully from day to day. The amount of time needed for study will vary with the individual student and the courses on his or her schedule.

2. Study in a suitable place -- the same place every day
   Is concentration one of your study problems? Experts tell us that the right surroundings will help you greatly in concentration. Your study desk or table should be in a quiet place -- as free from distractions as possible. You will concentrate better if you study in the same place every day.

3. Collect all the material you'll need before you begin
   Your study desk or table should have certain standard equipment -- paper, pen, an eraser, and a dictionary. For certain assignments you'll need a ruler, paste, a compass, or a pair of scissors. With all your materials at hand, you can study without interruption.

4. Don't wait for inspiration to strike -- it probably won't
   We can learn a lesson about studying from observing an athlete. Can you imagine seeing an athlete who is training for a mile run sitting on the field waiting for inspiration to strike before he starts to practice? He trains strenuously day after day whether he wants to or not. Like the athlete we get in training for our tests and examinations by doing the things we're expected to do over a long period of time.

5. A well-kept notebook can help raise your grades
   Research shows that there's a definite relationship between the orderliness of a student's notebook and the grades he makes. Set aside a special section for each of the subjects on your schedule. When your teachers announce important dates for tests and examinations, you'll find how priceless orderly notes can be.

6. Make a careful record of your assignments
   Why lose time phoning all over town to find someone who knows about
   your assignment? Put it down in black and white -- in detail -- in a
   designated place in your notebook. Knowing just what you are expected
to do and when you are expected to do it is the first long step toward
completing important assignments successfully.

7. Use "track secrets" for successful study
   Flash cards are "magic helpers." On the front of a small card you write
an important term in history, biology, English, etc., and on the back, a definition or
an important fact about that term. Carry your flash cards with you. At odd times
take them out and ask yourself the meaning of the term. If you don't know, turn
to the other side and review the answer.
   The "divided-page" is another trick of the study trade. Make a dividing line
down the center of a sheet of notebook paper. Then write important questions on
the left side and the answers on the right. Use the "self-recitation" method of
study. Cover the right-hand side and try to give the answer. Then check and
recheck until you're sure you know the material.
   A simple but effective study device is a "cover card." As you are studying,
look at your notebook or textbook and read what you have just read -- and try
reciting or writing the facts from memory. Check until you are sure you have
mastered these facts.

8. Good notes are your insurance against forgetting
   Learn to take notes efficiently as your teachers stress important points in
class and as you study your assignments. Good notes are a "must" for just before-
test reviewing. Without notes, you will often need to reread the whole assignment
before a test. With them, you can call the main points to mind in just a fraction of
that time. The time you spend in taking notes is not time lost but time saved.

9. Perhaps you've asked, "How can I remember what I've studied?"
   One secret of remembering is overlearning
   Psychologists tell us that the secret of learning for the future is
overlearning. Overlearning is continuing your study after you have learned the
material well enough to barely recall it. Experts suggest that after you can say, "I
have learned the material," you should spend in extra study one-fourth of the
original study time. In an experimental study, students who overlearned the
material remembered four times as much after 23 days had passed.

10. Frequent reviews will pay you well -- in knowledge, grades,
    and credits
   Without review the average student can forget 80 percent of what he has
read -- in just two weeks! Your first review should come very shortly after you
study material for the first time. The early review acts as a check on forgetting and
helps you remember far longer. Frequent review throughout the course can pay
you well -- in pretest peace of mind.
   All this is helpful only if you follow through!
TWELVE TIPS FOR STUDYING AND MANAGING YOUR TIME *

1. Plan a definite time for studying each day. This will discourage procrastination and prevent the pile-up of work.

2. Shorten your study time by knowing the purpose of each assignment, what to do, and how to do it before you leave class. Keep a record of all assignments in a special section of your notebook.

3. Predicting the amount of time needed for each assignment causes you to work harder so that you save time. By timing your assignments, you are more likely to concentrate and less likely to become bored.

4. Time yourself to see how long it takes you to read five pages of your textbook or a paperback. This will help you estimate the time needed to complete a reading assignment. Because a textbook is loaded with information, you may have to read some sections more than once. Even teachers have to reread material. Allow time for reflecting on what you read, too.

5. Pay attention to charts and diagrams. They can be shortcuts to understanding.

6. When a reading assignment is made, you can expect to have a discussion of the material or a quiz in class. Take a little time to review just before class so that you are ready to participate.

7. Every time you study spend ten minutes in review of previous assignments. These "refresher shots" are the secret for long-term memory. This habit of frequent review also results in less time needed for studying for a major test.

8. Use daytime for study if possible. At night you are likely to be less efficient.

9. After studying about forty minutes, take a five-minute break. This refreshes your mind so that you can concentrate better and finish faster.

10. Setting a "stopping time" at night will encourage hard work in anticipation of being through by ten o'clock or whatever time you set. Sometimes you may even beat the clock. The increased impetus helps you concentrate.

11. Don't cram for hours the night before a test. Instead, distribute your study in half-hour segments over a period of days.

12. Since learning is cumulative, new ideas must be incorporated with previous learning from lectures, readings, and lab experiments. You have to continuously make the connections and associations in your own mind. Putting it all together is easier if you schedule time daily to read, to think, to reflect, to review. Improved learning is the natural result of this approach to using your time.

MEMORY TIPS *

- What's your attitude?
  What is your very favorite thing in life -- a person? baseball? music? reading? How tough is remembering new information about that particular thing? That answer reveals your "memory potential." Are you impressed? You should be! (One student knows the batting averages of all the best player in the baseball leagues.)
  "But," you say, "math is not fun." Keep telling yourself that, and it never will be fun. Your prejudices affect your learning, so give some extra time to the subjects you dislike. Research indicates that the more you know about any subject, the more interested you become. Positive achievement is likely to follow.
  Don't be victimized by your own biases. You more readily forget what you don't agree with, so reap remembering dividends by keeping an open mind!

- Do you intend to remember?
  Or do you just want to get the assignment out of the way? Without a conscious decision to remember, you probably won't, and no one remembers what she or he has never really learned in the first place.
  Have high expectations of yourself! Focus on how good you'll feel after reading, when you know the material instead of just the three sons that played on the radio while you "studied."
  Also, studying subjects that are different, rather than similar, one after another (for example, history, then mathematics rather than political science) guards against interference and forgetting.

- Do you personalize the material?
  Have you ever forgotten a friend's comments on why you're special? Or a compliment paid you by someone you truly admire? Probably not. This shows the power of your memory if you are personally involved. As much as you can, follow this same principle in studying. For example, while reading, ask yourself, "How am I affected by this?"

- Do you "chunk" the learning?
  Right now, list three major ideas from the last reading assignment you completed. If you can't do it, then you're choosing to operate at a handicap. When you've finished studying a chapter and can recall seven or so major points, you've got those "key thoughts" that trigger your recall of the related significant details. A prime contributor to comprehension and memory, then, is to categorize ideas.

- Do you "handle" the material?
  The more means you use to learn now material, the greater the likelihood you'll remember it. Draw picture to illustrate points. Talk over assignments with friends. Recite information to yourself. Write notes on important points. Each one of these aids will increase your chance of recalling information the next time you need it. "Handling" the new ideas results in their moving form short-term memory to long-term memory.
  Remember -- if you don't use it, you will lose it!

- **Do you recite and review regularly?**
  Without any special study approach, you will forget 80 percent of what you learn within two weeks! Reverse that trend by reciting (speaking aloud) immediately after studying. Thereafter, review the content about once a week. When you feel that you’ve mastered the content, review it again — overlearn it — just to be sure.

- **Do you employ mnemonics?**
  Don’t forget — to memorize long lists of items, use the peg-word system, narrative chaining, or other memory systems. Your imagination is a powerful tool for memory, too!
MAKE TIME FOR YOUR KIDS

Set aside a part of everyday to talk with your children about their school day. What they enjoyed, what they didn't, what they learned and what they need help with. Make sure this is a regularly scheduled event and not something that's squeezed in here and there.

Another important thing you can give is praise. Success requires self confidence, praise and encouragement build that. Constant criticism destroys it. Children also need the chance to solve problems by themselves. They will encounter disappointments and frustrations at school, but they need to learn how to cope without relying on their parents for the solution.

Children need their parents' support and guidance, but they shouldn't get the impression that parents will solve all their problems.

An ad appeared in the Wall Street Journal with an idea that can strengthen the family.

Tonight
at the dinner table, read out loud to your family.
Tomorrow night, let another member read something.
A news story.
A Bible verse.
A Robert Frost poem.
A cereal box panel.
History, Humor.
Anything.
Each night a different family member can read a selection.

Imagine the wide range of subjects your family will read in 365 days.
What a stimulating way to have your children develop good reading habits.
We have 23 million illiterate adults in America.
We wouldn't have one, if each of them had been served reading as part of their nightly diet.
It's non-fattening, but enriching.
And it doesn't cost a dime.

Carole Auker, Reading Coordinator
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